

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

2 HD2096
A205
C2

INTERNATIONAL AGRICULTURE AND TRADE REPORTS

United States
Department of
Agriculture

Economic
Research
Service

WRS-95-3
June 1995

CHINA

Situation and Outlook Series



After Jumping 377 Percent This Year, China's Cotton Imports Will Stay Large in 1995/96

You need the

International Agriculture and Trade Reports to:

- understand what spurred China's imports of cotton and soybean oil
- see if you should bank on continued Russian wheat imports
- find out how the peso crisis affects U.S. agricultural exports
- get a handle on U.S. agricultural trade with Europe
- discover new markets for high-value products in the former Soviet Union
- learn what factors will affect future trade within NAFTA
- decide if you should count on corn exports to China
- determine where EU agricultural production and trade are headed

This four-report series includes *China, Europe, Former USSR*, and *NAFTA*. USDA economists draw on original foreign source materials to explain how basic forces are changing agriculture and agricultural trade around the world. Each report anticipates short- and long-term production, consumption, and trade of the region's key commodities. Detailed analysis backs up forecasts on how agricultural policies and structure, as well as macroeconomic and trade policies, will affect world food and fiber markets. Each report includes consistent, up-to-date data bases on key agriculture and trade indicators.

Call toll free 1-800-999-6779
to subscribe from the
United States and Canada.
Other areas, call **703-834-0125**
or fax **703-834-0110**, or
order subscriptions from:
ERS-NASS, 341 Victory Drive
Herndon, VA 22070.

Subscription rates for the *International Agriculture and Trade Reports (WRS)* are:

Mailed	1 year
<i>Domestic</i>	\$20
<i>Foreign</i>	\$25

Single copies are:
\$9.00 domestic, \$11.25 foreign.

United States
Department of
Agriculture

Economic
Research
Service

WRS-95-3
June 1995

Economics Editor
Frederick W. Crook
(202) 219-0030

Technical Editor
Martha Evans

Authors
W. Hunter Colby
Frederick W. Crook
Francis C. Tuan

Word Processing
Beverly Payton

CHINA

Situation and Outlook Series

Summary	2
China Battles the Inflation Dragon	3
U.S.-China Agricultural Trade in 1995 To Surpass \$2 Billion	5
Authorities Focus Spotlight on Agriculture	8
Government To Boost Inputs for 1995	11
Grain Output Projected To Rise in 1995	14
Despite Record Oilseed Output, Oil Imports Surged	17
China's Cotton Imports Surge	19
China Returns to Net Sugar Imports	21
Livestock Industry Expansion Fuels Corn Imports	22
Information on China via AutoFAX	24
List of Tables and Figures	25

Approved by the World Agricultural Outlook Board. Summary released June 14, 1995. Summaries and report text may be accessed electronically. For details on electronic access, call ERS Customer Service (202) 219-0515.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C., 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is a equal opportunity employer.

Summary

U.S. agricultural exports to China are expected to increase in 1995 because of rising cotton, corn, soybean oil, and other agricultural product sales. U.S. exports for 1994 totaled more than \$1 billion, up sharply from \$376 million in 1993. China's 1994 agricultural trade (imports and exports) rose 34 percent to \$31.8 billion. In autumn 1994 and early 1995, China's buyers entered edible oil, cotton, wheat, rice, and sugar markets to purchase commodities. In the same period, authorities banned corn and rice exports. These actions stimulated great interest in world commodity markets. China was a major corn supplier in east Asian markets from 1991 through 1994, but with the banning of corn exports in 1995, other suppliers are watching eagerly to see if China will re-enter those markets.

China's economy grew 11.8 percent in 1994 compared with 13.4 percent a year earlier. Authorities aim to slow the real economic growth rate in 1995 to under 10 percent. But it may be difficult for officials to pull off a soft landing for the economy—a myriad of institutional, political, economic, and social factors must be carefully balanced. During 1994, the general price level rose by 24 percent. For 1995, authorities aim to keep the rate of inflation below 15 percent. Officials allowed the money supply to expand by more than 34 percent in 1994, and as long as policy makers continue to shell out cash to keep failing government-owned enterprises afloat, it will be difficult to avoid inflationary pressures.

Total grain output is projected by China's leaders to rise from 445 million tons in 1994 to 455 in 1995 because of increased acreage and heavier input use. Local cadres likely will use administrative means and political pressure to force farmers to expand area sown to grain. Grain prices rose in 1994 and have remained high through mid-1995. The cost situation is less clear so it is difficult to project if the higher grain prices will induce farmers to increase area sown to grains. Rising personal incomes and population growth will fuel increased domestic demand for food and feed grains. Rice, wheat, and corn production are projected to rise because of increases in area and yield. Rice imports for calendar 1995 will likely exceed 1994's 900,000 tons, and will include both lower quality rice for poorer urban residents and higher quality Thai rice for higher income residents. Wheat imports are projected to rise to 12 million tons, up from a year earlier. Corn imports are projected to decrease from 3.5 million tons in 1994/95 to 1.5 million tons in 1995/96 as authorities carry out self-sufficiency policies for feed grains.

Grain output for 1994 decreased to 445 million tons, down 2.5 percent from a year earlier. A smaller summer grain crop (mostly winter wheat) and a decrease in area sown to spring

wheat, yielded a wheat crop of 99.3 million tons, the smallest crop since 1992. A mid-season drought and lower area saw paddy rice output decrease by 1 percent to 175.9 million tons. While corn outturn rose in Heilongjiang, Jilin, and Hebei, production fell in Shaanxi, Henan, and Liaoning provinces so that total output decreased to 99.3 million tons, down 3.3 percent from 1993.

Total oilseed output for 1994 reached a record 42.4 million tons, up 9 percent from a year earlier. But demand for edible oil outstripped supplies and imports soared to 2.5 million tons in 1993/94 and imports are projected to rise to 3.6 million in 1994/95.

Cotton imports rose 377 percent to an estimated 838,000 tons for August/July 1994/95. Domestic production for 1994/95 rose 16 percent to 4.33 million tons but regional shortages and government procurement problems pushed China to import large quantities of cotton. Planners call for expanded area sown to cotton and a bigger crop for 1995/96, but import demand likely will remain high.

Meat output rose 15 percent in 1994 to a record 43.5 million tons. Pork output rose 12 percent while poultry meat production increased 15.7 percent. However, rising feed prices could encourage higher slaughter rates in 1995. Over the long term, however, livestock inventories and meat output are likely to continue to grow.

The slight decrease in grain production and inflationary pressures in 1994 pushed Party leaders in 1995 to focus attention on the agricultural sector. Most market reform initiatives were put on hold in late 1994 and early 1995, and the administration resurrected some old programs such as grain rations for the urban poor. Instead of efficiency, profits, and lower costs, Party authorities are again stressing the importance of provincial self-sufficiency. Marketing reforms have been put on hold. Nonetheless, market forces remain strong, and in the coming years marketing reforms likely will surge forward again.

Government investment in the agricultural sector in nominal terms has risen in the past decade, but as a percent of total government expenditures, agriculture is getting less funding than a decade ago. Farmers cannot expand cultivated area very much. Factors affecting yield increases will be the prime mechanisms boosting production. But agricultural researchers are getting less funding at a time when they should be getting more. The shortage of investment funds for research and extension will hurt long-term growth efforts.

China Battles the Inflation Dragon

China's economic growth of 11.8 percent in 1994 was only slightly below that of 1993 and the third consecutive year of double-digit growth. But this rapid growth was accompanied by a 24-percent rate of inflation. Inflation is expected to be 17-22 percent in 1995 because of Government action to control the money supply and constrain growth. China's leaders are searching for a way to guide their economy to a "soft landing" in 1995 that will permit growth, cut inflation, and avoid social and political disruptions in the country.
[W. Hunter Colby (202) 219-0619]

Rapid Economic Expansion To Continue in 1995

China's economic growth target for 1995 remains quite high at just under 10 percent. The target is reasonable, given last year's rate of just under 12 percent, continued high rates of foreign investment, and the likelihood of rising exports. The official target for consumer price inflation in 1995 is 15 percent. Noting that the 1994 target was 10 percent, while the actual rate was at least 24 percent, it is unlikely that inflation will fall to the government target given the expected high economic growth. Inflation somewhere between 17 and 22 percent is probably a more reasonable forecast.

In the first 3 months of 1995, economic growth was 11.2 percent (annualized) compared with 12.7 percent a year earlier. Likewise, consumer prices in March 1995 were down more than 1 percent from February, though they were 21.3 percent over March 1994. This was the sixth consecutive month-on-month decline in the consumer price index. Industrial output growth in the first 3 months also declined, falling to 14.4 percent as compared with 16 percent during the same period of 1994. Although the declines in these indicators suggest the economy is slowing down, it is premature to claim, as China's government officials are beginning to do, that the economy is heading for a "soft landing." Tight credit policies will have to be maintained, and the political and social repercussions of that will only increase over time.

In terms of policy, for 1995 there appears to be a trend at the central government level to pull back from sensitive problems and difficult reforms. Modest measures to control inflation and market inefficiencies will surely occur in 1995. However, more important and difficult moves, such as reforming the state-run industrial sector, are unlikely.

China is expected to see healthy growth throughout the next decade. Growth is forecast to gradually decline, reaching 5.8 percent by 2005. China is expected to struggle with infrastructure constraints throughout this period, which will limit growth, but not shut it off altogether.

Potential exists for serious social or political problems in China, particularly given the imminent question of the succession to Deng Xiaoping. Rising unemployment, migration to cities, and increasing instances of rural dissatisfaction are also potential flash points. Nevertheless, China is expected to successfully muddle through its problems, much as it has since the reform program began in 1979.

China's Rapid 1994 Growth Marred by Rising Inflation

China's 1994 gross domestic product (GDP) reached 4.38 trillion RenMinBi (RMB) (\$508 billion), a real growth rate of 11.8 percent over 1993 and China's third consecutive year of double-digit economic growth. On a constant price basis, the gross value of industrial and agricultural output increased 5.7 and 5.2 percent, respectively. Oilseed crops, cotton, vegetable, fruit, meat, poultry, and egg output all increased, though total grain output fell slightly. The \$12.2 billion trade deficit of 1993 shifted to a nearly \$5.4-billion surplus in 1994. The rate of growth of exports increased dramatically, rising from 8 percent in 1993 to 32 percent in 1994. Conversely, the rate of growth of imports fell from 29 to 11 percent.

In 1994, China's economy was also characterized by rapid retail inflation (particularly food prices), halting reform of debt-ridden state enterprises, worsening government fiscal arrears, overextending of investment in fixed assets, and uneven development of basic industries and infrastructure. In 1994, contradictions caused by the coexistence of institutions from the old centrally planned economy and the new forces of the market economy caused or exacerbated a number of economic and social problems, including rising inflation, a resurgence of corruption among government officials, and a host of increasingly serious social problems (migration to cities, a rising birthrate, and rising income inequalities).

Table 1--China's macroeconomic indicators, 1993-94

Indicator	Units	1993	1994
Population	Million	1,185.2	1,198.5
GDP growth 1/	Percent	13.4	11.8
GDP	Bil RMB	3,138.0	4,380.0
Change in CPI	Percent	13.2	21.7
Currency in circulation	Bil RMB	585.6	728.9
Total state revenues	Bil RMB	5,115.0	5182.0
Total state expenditures	Bil RMB	5320.0	5,820.0
State budget deficit	Bil RMB	205.0	638.0
Fixed asset investment 2/	Bil RMB	1,245.8	1,592.6

NA = data not available.

1/ GDP growth in constant value terms. 2/ All sources.

Sources: SSB, 1995 Communiqué and SSB, 1994 Statistical Yearbook.

Institutional Inflation Factors Remain a Problem

One of the most important tools available to the central government for managing the macroeconomy is ordering the People's Bank of China (PBOC) to restrict or relax the extension of credit. Much of the roots of China's inflation problems are institutional. The inefficiencies and contradictions of China's hybrid economic system and the institutional position of the PBOC as essentially just another ministry under the State Council (China's "cabinet") results in a strong bias towards monetary expansion and resultant inflation.

The central bank, the PBOC, which in addition to controlling 80 percent of China's financial assets either directly or through subsidiary banks, is responsible for funding the central government budget deficit (though domestic bond issues have recently reduced that exposure). That nearly always means an unplanned expansion of the money supply at the end of the fiscal year as the PBOC covers the central government budget deficit.

Second, the central bank is also pressured by provincial government and ministry officials to increase loans to state-run enterprises in their province or under their ministry. Money allocated for wages or government mandated procurements is spent elsewhere, requiring the PBOC to bail out the enterprise. From the perspective of China's leadership, the unemployment ramifications of bankruptcy mean it is still not an option for most large state-run enterprises. This also contributes to China's expanding money supply and inflation.

And finally, the rapid pace of foreign investment in the last few years has also contributed to inflation as foreign currency is converted into RMB. Although investment reached \$30 billion in 1993, the rate of growth declined somewhat in 1994 and is expected to continue to drop off as the decade progresses.

Food price inflation and the government's attempts to manage it were two of the central features of 1994. In 1992/93, at the invitation of the central leadership, provincial governments began to dismantle the centrally planned agricultural commodity purchase and supply system. Some provinces did essentially nothing, others introduced modest free market-oriented reforms, while still others threw agriculture marketing wide open. By 1994, food prices, and most importantly grain prices, were rising rapidly. Fearful of angering urban residents, the government pulled back, reinstating parts of the centrally controlled marketing and supply system, and allowing agricultural imports to increase. In addition, government-fixed retail grain prices were reinstated at urban state grain stores for rice, wheat flour, noodles, and edible vegetable oils. By April 1995, however, grain prices had generally stabilized.

The State Sector Continues To Lag

China's total industrial output value grew 34.8 percent in 1994, compared with nearly 42 percent in 1993. Within the industrial sector, state-run enterprises continued to lag far behind collective and private enterprises in growth. During 1994, the state sector had rising stockpiles of unsold (and in many cases unsaleable) goods, high inter-enterprise debt levels, continued over-staffing, employee welfare and wage costs

outpacing productivity growth, and a rising number of enterprises operating in the red.

Central government policy continues to promote the state industrial sector as the "backbone" of the economy. Although China's leadership recognizes the problems facing the state sector, it refuses to apply hard budget constraints or the bankruptcy law in all but a few relatively minor cases. The government fears the unemployment and potential social unrest that would follow a full-fledged rationalization of the state industrial sector.

Table 2--Industrial and agricultural output value, 1992-94

Sector	Units	1992	1993	1994
Total industry 1/	Bil RMB	3,707.0	5,269.0	7,105.0
State sector	% change	12.4	5.7	5.5
Collective sector	% change	39.3	36.0	21.4
Private sector	% change	52.9	68.0	28.0
Total agriculture 1/	Bil RMB	909.0	1,100.0	1,575.0
Crops	% change	4.3	5.2	3.2
Forestry	% change	7.7	8.1	8.9
Animal husbandry	% change	8.8	10.8	16.7
Sideline products	% change	11.2	NA	NA
Aquatic	% change	15.3	18.4	20.0

NA = data not available.

1/ Total industry and agriculture values are calculated on the basis of current prices, while growth rates are calculated on the basis of comparable prices.

Sources: SSB, China Statistical Yearbooks, 1992-94. SSB, China Statistical Abstract, 1995.

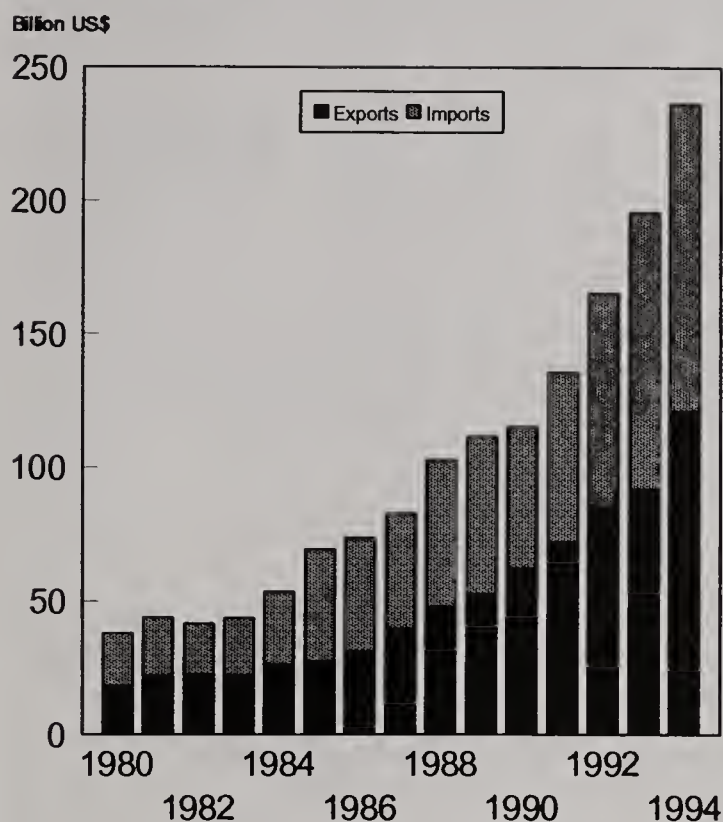
Table 3--China's foreign trade indicators, 1991-94 1/

Item	1991	1992	1993	1994
U.S. \$ Billion				
Exports:				
Total	71.91	85.00	91.76	121.04
Agriculture	10.55	15.26	15.87	20.03
Share(%)	14.70	17.90	17.30	16.55
Imports:				
Total	63.79	80.60	103.95	115.69
Agriculture	6.07	8.65	7.73	11.80
Share(%)	9.50	10.70	7.40	10.20
Balance:				
Total	8.12	4.40	-12.19	5.35
Agriculture	4.48	6.61	8.14	8.23
Foreign exchange reserves	21.71	19.44	21.19	49.68
Avg. exchange rate	5.32	5.51	5.76	8.62

1/ Trade data are calendar year and f.o.b.

Sources: PRC, Customs Statistics and IMF Statistics.

Figure 1
China's Total Trade



China Switches to a Large Trade Surplus

In 1994, trade performance improved overall as the country switched from a trade deficit to a surplus. Yet, agricultural imports increased dramatically, with the U.S. share in imports rising sharply. This trend of rising agricultural imports is expected to accelerate over the coming decade (figure 1).

In response to rising agricultural imports and domestic food price inflation, in 1994 the government reestablished central controls over some imports and exports, including banning corn and rice exports and reasserting central-level control over sugar import quota allocation and approval. Unless domestic production increases in 1995/96, agricultural trade will likely continue to see higher levels of government involvement than during the early 1990's.

References

1. "PRC State Statistical Bureau Statistical Communique on the 1994 National Economic and Social Development." Beijing Xinhua Domestic Service, Feb. 28, 1995, in Foreign Broadcast Information Service.
2. "A Survey of China." *The Economist*, March 18-24, 1994.
3. FAS Agriculture Post Annual and Voluntary Reports, various issues.

U.S.-China Agricultural Trade In 1995 To Surpass \$2 Billion

U.S. agricultural exports to China for 1995 are expected to reach \$2 billion because of large purchases of U.S. cotton, soybean oil, wheat, corn, and other agricultural products. For 1994 U.S. agricultural exports totaled \$1.08 billion, the largest since \$1.4 billion in 1989. In 1994 the United States imported \$440 million in agricultural products from China, leaving an agricultural trade surplus of \$640 million. But with regard to the overall balance of trade, the United States had a deficit with China of nearly \$29.5 billion, the second largest trade deficit next to Japan. [Francis C. Tuan (202) 219-1282]

U.S. agricultural exports to China in 1994 nearly tripled that of the previous year, reaching more than \$1 billion for the first time since 1990. Agricultural imports from China for the same year were down marginally. In 1994, sales of wheat, cotton and soybean oil to China contributed 85 percent of total U.S. agricultural exports earnings to the country. Assuming agricultural imports from China remain at the same level or grow in 1995, total agricultural trade between the two countries is expected to top \$2 billion for the first time since 1982. The increase, mainly because of growing exports of U.S. goods, will again stem from larger purchases of grain, cotton, and soybean oil.

U.S. Agricultural Exports to China To Grow Sharply in 1995

In 1994, the U.S. merchandise trade deficit with China continued growing and reached \$29.5 billion, 29 percent over the

previous year and almost triple that of 1990. The overall U.S. trade deficit with China is second only to Japan's \$65 billion. The 1993 agricultural trade deficit with China, however, was reversed in 1994 and turned to favor the United States. U.S. agricultural exports soared to nearly \$1.1 billion in 1994, while agricultural imports from China were near the 1993 record level of \$440 million (table 4).

U.S. cotton exports to China surged from 179 tons in 1993 to more than 400,000 tons in 1994, the largest quantity since 1980, making China the number one U.S. cotton market. Increased cotton exports accounted for more than 90 percent of the increase in the value of U.S. agricultural exports to China (ERS autofax No. 6554). China's cotton production in 1992 and 1993 dropped sharply from 1991 because of bollworm infestation, particularly in the northern provinces of Shandong, Hebei, and Henan. However, high stocks and

Table 4 -- Agricultural and total trade between the United States and China, 1984-94

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Million U.S. dollars											
Total ag imports	191	197	204	237	279	319	271	328	379	451	440
Total ag exports	613	157	57	362	759	1,435	814	722	545	376	1,080
Wheat	576	105	0	139	698	1,109	497	363	273	278	166
Cotton	4	2	--	--	25	259	277	319	186	--	645
Soybean oil	7	--	0	0	0	0	0	1	8	--	104
Balance	422	-40	-147	125	480	1,116	543	394	166	-75	640
Total imports	3,065	3,863	4,672	6,195	8,510	11,990	15,224	18,855	25,514	31,425	38,781
Total exports	3,004	3,808	3,077	3,469	5,021	5,755	4,807	6,238	7,339	8,619	9,287
Balance	-61	-55	-1,595	-2,726	-3,489	-6,235	-10,417	-12,617	-18,175	-22,806	-29,494

-- = Negligible

Source: USDA, Foreign Agricultural Trade of the United States (FATUS).

success in reducing natural fiber use in yarn and textile manufacturing allowed the country to reduce total cotton imports to below 10,000 tons in 1993, compared with 280,000 tons imported in 1992. However, below average cotton output in 1994, coupled with domestic cotton shortage for textile use, questionable quality of stocks, and inability to transfer cotton to deficit areas, prompted China to buy U.S. cotton beginning in the first quarter of 1994. Imports continued even though world cotton prices rose 60 percent. By year end, China had imported \$645 million of U.S. cotton.

U.S. soybean oil exports to China also rose substantially, from about 620 tons in 1993 to over 180,000 tons in 1994. In the past, China imported only minimal quantities of soybean oil from the United States and the value of U.S. soybean oil exports to China never exceeded \$10 million. In 1994, U.S. soybean oil exports to China totaled more than \$100 million. China bought large quantities of edible vegetable oils in 1994 for several reasons. Urban residents with high income prefer the taste of high quality soybean oil and are gradually shifting away from rapeseed and cottonseed oil consumption. Although in the past year, China's government restricted imports of edible oil, in 1994 it allowed imports to bolster domestic supplies to reduce high prices. In addition, palm oil prices rose significantly in 1994, and firms in the food processing sector may have partially substituted soybean oil for palm oil in traditional uses.

In 1994, U.S. wheat exports to China declined 30 percent to 1.9 million tons, although China's total wheat imports from all sources increased slightly from the previous year to 7.2 million tons. Consequently, in 1994, the value of U.S. wheat exports to China declined to \$166 million, 40 percent lower than the previous year. Wheat has often been the leading U.S. agricultural commodity sold to China, accounting for 50 to 85 percent of total export value in the last several years. In 1994, however, wheat exports contributed only 15 percent of the total. China managed to import a lower level of wheat in 1994 because of bumper grain harvests for 4 consecutive years and because of sharp increases in wheat prices in world markets. In 1994, China's grain output fell 2.5 percent and wheat production was down by 3 million tons. With continu-

ous increases in income and population, China is expected to need to resume higher wheat imports in 1995, despite persistent high prices in world markets.

Rice and Corn Exports Banned in 1994, Exports Continue To Grow In 1995

In 1994, China's agricultural exports rose 26 percent to \$20 billion, although in the autumn the government stopped rice and corn exports. Despite significant increases in agricultural imports, the country's agricultural trade surplus still managed to expand marginally to \$8.2 billion, and continued to contribute to the overall trade surplus.

Increased exports in 1994 came primarily from higher fish, meat, soybean, soybean cake, and peanut sales. Nevertheless, exports of items such as raw silk, rabbit hair, and feathers and down also increased substantially from the previous year (ERS autofax No. 6552). Cereal exports were down about 17 percent compared with a year earlier. As described previously, China's grain production decreased 2.5 percent to 444.5 million tons. In urban areas, grain price increases ranged from 25 to 50 percent. Grain prices rose for several reasons, including implementation of market reforms, farmers' unwillingness to sell grain in open markets and to government buyers when prices were rising, and imperfect information on market prices and grain supply and demand conditions in the country. China's government began to ban corn and rice exports during the autumn to boost domestic supplies to mitigate the worsening inflation.

The export ban caused China's corn shipments to drop sharply late in the year. Also, some East Asian corn buyers reported problems of high moisture levels in corn coming out of Manchuria. But in 1994, China held its share of the Korean market. According to China's Customs Statistics, the country's total corn exports dropped from 11.1 million tons in 1993 to 8.7 million in 1994 (ERS autofax No. 6555). However, recent reports from China indicated that China was shipping little corn to East Asian countries during the first quarter of 1995.

In 1994, values of several exported items such as cotton, walnut, prawns, and honey decreased significantly. Increased exports of cigarettes were offset by less tobacco leaf sales which were down 30 percent from the previous year.

Grain Imports To Rise, Corn Imports To Resume in 1995

China tendered to purchase 2 million tons of corn from the United States at the end of 1994 and have continued to purchase additional corn in 1995, although there was a cancellation of more than 600,000 tons in early February. As of late April, purchases totaled almost 2.2 million tons. Wheat imports are also likely to increase in 1995 because of a smaller 1994 wheat crop and because of rising incomes and population growth. Barley imports will also likely rise to support China's rapidly growing beer industry. Beer output reached 13 million tons in 1994, and a number of foreign investors are planning joint ventures with local breweries to expand output (ERS autofax No. 6555).

Therefore, 1995 agricultural imports are expected to grow significantly above that of the previous year. China's 1994 agricultural imports were \$10.2 billion, up 53 percent from the preceding year. Imported wheat increased from \$834 million in 1993 to \$943 million in 1994, compared with 2.6 and 2.2 billion in 1989 and 1990, respectively (ERS autofax No. 6553 and 6556).

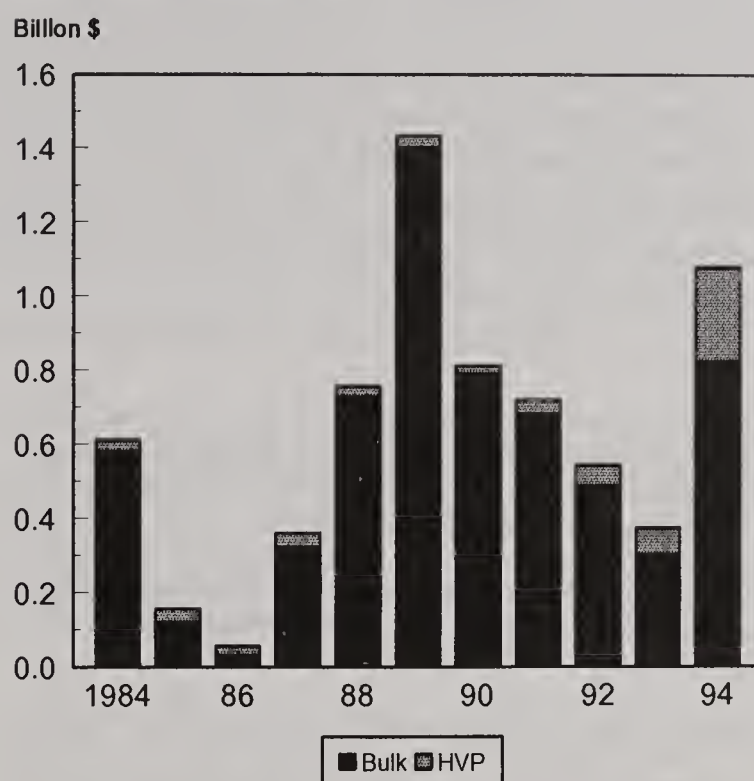
According to China's customs data, edible vegetable oil imports shot up from 240,000 tons in 1993 to 1.63 million tons in 1994. Palm oil imports remain high at 1.58 million tons despite much higher unit prices. Long-term demand for edible oil, including palm oil, should increase as incomes rise and consumer preferences shift. China's per capita oil consumption is still below the world average and only about a quarter of that of Taiwan and a third of Hong Kong.

U.S. High Value Product Trade To Grow

U.S. consumer-ready and processed product exports to China have been expanding, and the trend is expected to continue. Trade statistics from the U.S. Bureau of Census indicate that these exports have grown almost 29 percent between 1983 and 1993, and accelerated in the 1990's to 49 percent. In 1994, high value product exports to China expanded 250 percent to nearly \$257 million, mainly because of sharp increases in soybean oil exports (figure 2). Moreover, China should place in the top twenty markets for U.S. high value products if the goods transshipped through Hong Kong, such as apples and chicken parts, were recorded as U.S. exports to China.

Figure 2

U.S. Bulk and HVP Exports to China, 1984-94



Source: FATUS, Calendar Year Supplement, ERS, USDA.

U.S.-China Agricultural Trade To Increase If China Admitted to WTO

China intensified its efforts, particularly during the second half of 1994, to attain General Agreement on Tariffs and Trade/World Trade Organization (GATT/WTO) membership but failed to complete negotiations by the end of 1994, its self-imposed deadline. The world trading community told Beijing it must permit wider market access before China can join the global trade oversight body. The working party on China's accession reconvened in Geneva in May after an agreement between the United States and China was signed in March on further steps by China to open markets to U.S. products, including agricultural items such as apples, cereals, and livestock products. This action paved the way for the United States to declare firm support for China's WTO application. U.S.-China agricultural trade likely will expand with China's admission to the global trade body, since both countries will be required to open their domestic markets wider. Greater market access also will reduce the overall trade imbalance between the two countries because the U.S. should have greater access to China's market in the coming decade.

Authorities Focus Spotlight on Agriculture

In 1993 China's leaders encouraged the use of market mechanisms to manage their grain economy and reduced emphasis on central planning mechanisms. But the unanticipated rise in agricultural commodity prices and inflation in the economy forced authorities to suspend market reform initiatives. Since early 1994 authorities curbed market reforms and re-instituted some of the old central planning mechanisms, such as rationing for the urban poor. But in the coming decade the faults of government-administered price regimes will become manifest and marketing reforms likely will resume. [Frederick W. Crook (202) 219-0030]

Since October 1993, authorities in Beijing have held three high level conferences to deal with developments in the rural economy. Inflation, rising grain prices in 1994, and a slightly lowered grain crop in 1994, prompted leaders to focus even more attention on the rural economy for 1995. In January and February 1995, the State Council and the Central Committee of the Communist Party of China (CPC) held a Rural Work Meeting.

Premier Li Peng, Party Secretary Jiang Zemin, and Vice Premier Zhu Rongji gave speeches at the February Rural Work Conference and outlined four objectives to be completed in 1995.

- "We must bring inflation under control; insure healthy growth for the national economy; and develop agriculture."
- "The five major tasks for the rural economy are: 1) insure supplies of non-staple foods ('vegetable basket') for urban residents; 2) insure supplies of grain ('grain bag') for urban residents; 3) insure comprehensive development of the agricultural sector; 4) insure steady income for peasants; and 5) insure social stability in rural areas."
- "The country demands greater efficiency for grain and cotton production; an increase of agricultural inputs; and effective implementation of marketing policies for grain and cotton."
- "The nation will give increasing importance to the agricultural sector. If we vigorously implement policies, the agricultural sector can be lifted to a higher level" (3).

The "Invisible Hand" vs. the "Invisible Boot"

From 1949 through 1980, authorities primarily used central planning mechanisms such as production targets, fixed prices, and administrative orders to manage the economy. But since 1980, party and government leaders have encouraged the development of markets and the use of the "invisible hand" to solve economic problems. Most goods now move through open free markets, which are having an increasingly powerful effect on producers, processors, millers, wholesalers, retailers, and consumers. Market activity can be observed in urban and rural areas, evidence that the forces of supply and demand are functioning in the economy.

Nonetheless, party leaders also fear the "chaos" of the market and in the mid-1990's reverted to administrative fiat, pressure, and coercion, or the "invisible boot," to attain their policy objectives. Western scholars often have great difficulty analyzing the invisible boot. Even when rules and policies are made public, it is difficult to observe local cadres implementing the rules and farmers responding to them.

The competition between these two radically different economic systems creates turmoil in China's economy and compounds the difficulty of tracking and forecasting producer and consumer economic behavior. For example, open market corn prices were decreasing in autumn 1992 and winter and spring 1993. It was thought that corn output would decline as farmers reduced area sown to corn to plant alternative crops which would bring greater returns. What was not known was that local cadres used administrative means and pressure (the invisible boot) to motivate farmers to maintain corn area. Thus, corn output for 1993 was a record 103 million tons! While interpreting events in China, it is prudent to remember that both the "invisible hand" and the "invisible boot" function in the rural economy.

The Grain Mandate of Heaven

In ancient times new dynastic leaders justified their claim to rule China by declaring that they possessed the "mandate of heaven." This allowed them to govern, but the rule also required leaders to defend the borders and maintain social order, the key component of which was maintaining food supplies and storing grain reserves. Current leaders believe that part of their political legitimacy is tied to providing grain and edible oils to their political constituency—the urban proletariat. For example, in August 1994, Vice Premier Zhu Rongji made the following remark.

There will be reduction in grain output this year, even without natural calamities, and the drop in grain production will be still more serious if there are natural calamities. Hence, governments and departments at all levels should make positive efforts to store grain so as to avoid the possibility of urban residents running short of rice supplies. (4)

Mr. Liu Jiang, Minister of Agriculture stated in February 1995, "Only if the state has sufficient commodity grain will there

Policy Objectives	Policy Tools
Insure urban food	Adjust production, consumption, and marketing. Issue ration coupons.
Raise farm income	Adjust prices, reduce taxes.
Stabilize Prices	Adjust money supply, investment, saving, adjust production, consumption, and marketing. Set prices.
Encourage food self-sufficiency and accumulation of grain reserves	Build or use stocks.
Participate in world trade	Adjust imports and exports.

be the basic conditions for guaranteeing the livelihood of the urban residents and guaranteeing social stability.” (5) The party secretary from Anhui province stated in March 1995 that “We must always keep a clear head over the grain production issue, and keep firmly in mind the lesson that grain shortages cause instability; and under no circumstance should we overlook this issue.” (1).

Authorities in Beijing can use their administrative power to manage grain supplies. If the price of grain to urban residents is judged to be harmful to the interests of urban residents, authorities can use their power to adjust crop area and improve input supplies to increase grain output and lower prices. They maintain grain stocks as a food security measure, and if deemed necessary can draw down stocks to supply urban residents. If necessary the authorities can adjust grain supplies to urban residents and can control the type and quality of grains delivered to urban residents. They have some power to control grain transfers from surplus to deficit areas. They can restrict grain exports to make more grain available domestically, and finally, they can allocate foreign exchange to import grain. As is the case with many countries some of these objectives are contradictory. For example, it is difficult to raise farm income, keep prices stable, and provide adequate supplies of wholesome cheap food for urban residents all at the same time. In the chart below, China’s food policy objectives are summarized on the left while administrative tools to attain those objectives are on the right.

While interpreting events in China, it is useful to keep in mind the conflicting food policy objectives; to note that often authorities act to protect the interest of urban residents; and to realize that authorities have many tools to manage their “Grain Mandate of Heaven.”

Agricultural Commodity Market Reforms Arrested in 1994

From an agricultural point of view, the years 1993 and 1994 should be called the years of the snake because of the twists and turns which took place in grain and edible oil policies. In spring 1993, government authorities announced broad-reaching policies, which if carried out would have driven China’s grain economy toward an open market system. For example, grain sales through open markets rose in nominal terms from 13.3 billion RMB in 1992 to 22.6 billion (\$2.7 billion) in 1993, a 70 percent increase. But there was much back-tracking in 1994. The table below documents the primary events in this period.

1993

- Spring** Announced grain rations for selected provinces would end, and announced the end of fixed quota procurements for selected provinces.
- Summer** Central Committee met to discuss raising rural living standards by increasing grain prices and ending subsidies for inputs.
- Fall** Central Committee decided to raise grain prices to improve rural living standards and end input subsidies.
- Dec.** Grain prices rose (ERS Autofax No. 6540).

1994

- Early** A Rural Work Conference was held and the Central Committee re-instituted the fixed quota procurement system.
- Spring** A second Rural Work Conference was held and the Central Committee issued instructions to hold down rising food prices.
- Summer** Food prices rose. State Council tightened grain purchasing. Some provinces required that individuals and enterprises could not purchase grains until counties had completed their state grain purchase plan.

State Council took measures to control the supply and price of chemical fertilizers. Individuals were forbidden from marketing chemical fertilizers.
- Fall** Food prices continued to rise. Grain purchase procedures were tightened. Transactions in commodity markets were limited. Caps were placed on urban retail prices.

State Council issued instructions to local governments to delay new price reform measures.

Local price bureaus were given authority to set ceiling prices.

Corn and rice exports banned.

Early Provincial governors charged with responsibility for grain supply and use in their own province. China's press coined a new phrase for the new self-sufficiency policy: the "grain bag." Governors must establish local grain reserves and a corresponding grain risk fund to dampen fluctuations in grain prices. Grain and edible oil transfers between provinces have to be approved by Beijing. At the same time mayors of medium and large-sized cities were charged with the task of boosting supplies of non-staple food items for urban residents.

Transactions in grain and edible oil future markets are scheduled to end, but transactions in cash markets continued.

The State Council reorganized the Supply and Marketing Cooperative system and brought operations under its direct control. This was done to strengthen state control over the purchase of raw cotton and the marketing of farm inputs.

The central government restored the practice of issuing quotas for sugar imports.

Provincial governments revived the grain and edible oil ration system for the urban poor.

May Government reiterated its ban on corn exports.

Before July 1, tax officials applied a 13-percent value added tax (VAT) on exports of agricultural products but issued rebates. After July 1, the VAT on agricultural products will continue at 13 percent, but the rebate will be reduced from 13 to 3 percent. This action will make exports more expensive in international markets.

National conference on managing funds for agriculture held. Vice Premier Zhu Rongji warned the banking system to make sure that government funds set aside to support agriculture were not diverted to other purposes.

National conference of the All-China Federation of Supply and Marketing Cooperatives. Vice Premier Zhu Rongji and Li Lanqing urged cooperative officials to fulfill state obligations to deliver chemical fertilizers to farmers and purchase raw cotton.

Evaluation

What effect will the speeches, rhetoric, and the posturing by China's leaders have on rural policy in 1995? Certainly lower level cadres will respond to some degree to these pronouncements and use their power of the invisible boot to expand grain cultivation. Currently China's central authorities stress self sufficiency themes. The reasons for this shift are not clear but it is possible that current restrictions on foreign grain trade and internal grain transfers are tied into political struggles between Beijing and the provinces. Beijing seems to be forcing provinces to deal with their grain supply issues in a special context. Beijing reserves the right to control both foreign grain imports and exports and grain shipments across provincial boundaries. These policies leave provinces with few options—the primary one of course is for local authorities to arrange local production such that the province is self-sufficient in grain.

A Deputy to the March 1995 session of the National Peoples Congress, Mr. Dai, who is a farmer, noted at the meetings, "The state purchases grain from farmers mostly according to plan, while farmers have to buy agricultural capital goods in the market." (6) The government raised its fixed quota purchase price by a few Chinese 'dimes,' while the urban-based chemical fertilizer industry was permitted to market its product in open markets. Grain prices rose 40 percent in 1994, but the cost of chemical fertilizer doubled. Farmer Dai concluded by saying, "Over the last few years much has been said about agriculture, but little has been done." (6)

Over the past 3 decades there has been the cycle of lowered or stagnant grain output, followed by conferences and speeches by senior party officials, but little real support for agricultural production. When push comes to shove, authorities opt not to invest large sums in the agricultural economy. Instead, authorities use low cost organizational schemes to insure steady supplies of relatively cheap food for urban areas to placate urban interests. Government leaders have announced their intention to increase investment in 1995. Minister of Finance Liu Zhongli, for example, reported at the National People's Congress that central and local government investment in the agricultural sector will increase nearly 14 percent over 1994 (2). But it remains to be seen if the funds will actually have an impact on agricultural production or whether, as has happened so often in the past, capital funds marked for agriculture will be used by local authorities to invest in industrial enterprises which yield a higher rate of return.

Clearly the energy behind the marketing reforms initiated in late 1993 and early 1994 dwindled in late 1994 and 1995. It is not likely that reforms of the marketing system will be pressed in 1995, as government leaders seemed to be most concerned about maintaining social stability—especially in urban areas. But in the coming decade, marketing reforms likely will edge forward again as government-administered price regimes reveal their inadequacies.

References

1. "Anhui Rural Work Meeting Opens 28 March," Hefei, Anhui People's Radio, March 29, 1995; translated in Foreign Broadcast Information Service, No. 79, April 25, 1995, p. 55.
2. "Finance Minister's Report," Beijing, Xinhua in English March 6, 1995; translated in Foreign Broadcast Information Service, No. 43, March 6, 1995, p. 38.
3. He Jianzheng and Jiao Ran, "Conference on Rural Work Outlines 1995 Tasks," Xinhua Domestic Service, February 28, 1995; translated in Foreign Broadcast Information Service, No. 42, March 3, 1995, p. 51.
4. Ho Lu, "Zhu Rongji Readjusts Reform Policies for 2nd Half," *Ming Pao*, August 9, 1994, p. 5; translated in Foreign Broadcast Information Service, No. 153, August 9, 1994, pp. 38-39.
5. Liu Jiang, Minister of Agriculture, "Deepen Understanding, Do Solid Work in Advance, and Fight Well the Battle of Early Rice Production," *Nongmin Ribao*, February 24, 1995, pp. 1 and 4; translated in Foreign Broadcast Information Service, No. 75, April 19, 1995, pp. 39-45.
6. "Planting More Grain Crops is Consensus Between Government and Farmers—Dialogue Between Provincial Party Secretary and Farmer," Beijing Xinhua in English, March 7, 1995; included in Foreign Broadcast Information Service, No. 45, March 8, 1995, pp. 21-23.

Government To Boost Inputs for 1995

A 2.5-percent decrease in grain output in 1994 shocked Beijing authorities into action for 1995. They intend to boost supplies of key inputs such as chemical fertilizers, diesel fuel, plastic film, pesticides, and farm machinery to avoid another decrease in grain output. Yet government spending for agricultural as a percent of total government expenditures has fallen from the mid-1980s. Agricultural scientists and extension personnel are not receiving the kind of support they need to boost crop and livestock yields in the coming decade. The situation could become critical only if leaders in Beijing fail to recognize the problem and continue to neglect investment for agricultural research. [Frederick W. Crook (202) 219-0030]

Government Expenditures for Agriculture Slow

Before reforms were initiated in the early 1980s, government authorities acted as prime investors in the rural economy, either allocating funds from government revenues, investing commune capital accumulation funds, or managing corvee labor projects (mandatory work days imposed on the rural labor force as a form of rural taxes), such as building roads, canals, and drain ditches. After reforms, government authorities continued these activities, but farmers and economic cooperatives entities also began to invest. Because farmers do not own the land they cultivate, they tended not to invest to improve their fields, rather they invested in building and repairing their homes. For example, in 1994, farmers built 580 million square meters of new housing. Also, they invested in rural industry, which gave higher rates of return than crop raising, and invested in small tractors and wagons to earn money transporting goods. Currently, government expenditures underpin increasing agricultural production.

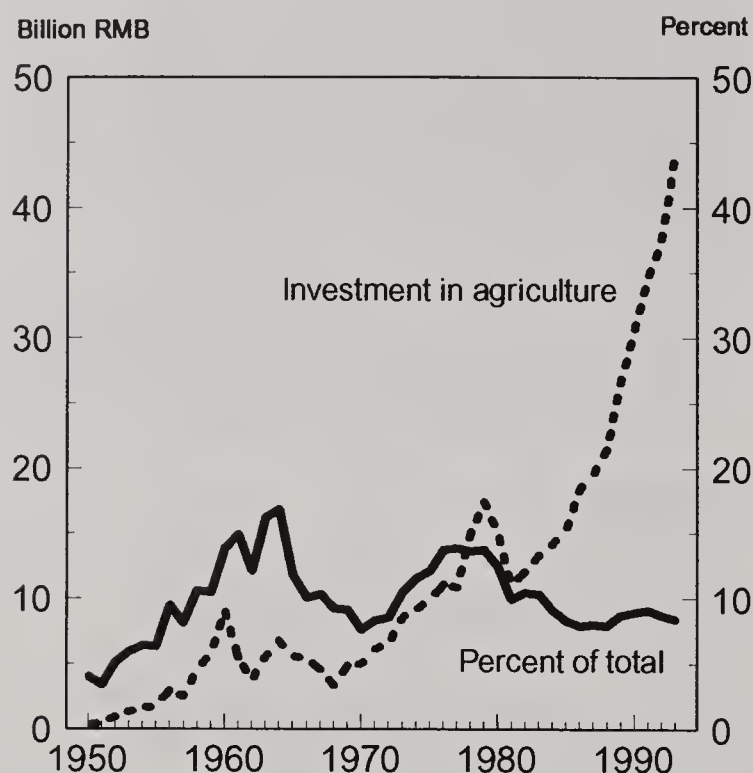
China's gross domestic product (GDP) rose from 359 billion RMB in 1978 to 3,138 billion (\$369 billion) in 1993, an annual average growth rate of 15.6 percent. In the same period, government expenditures rose from 111 billion RMB to 529 billion in 1993. But the growth rate in expenditures rose at an annual average rate of 11 percent, considerably less than that for GDP. This means that state expenditures as a

percent of GDP fell from 31 percent in 1978 to 17 percent in 1993 (ERS Autofax No. 6563).

Expenditures for capital economic construction fell from 60 percent of total expenditures in 1978 to 41 percent in 1993. Likewise, defense spending decreased from 13 percent of total expenditures in 1978 to 8 percent in 1993. But the percentage expenditure for education and government administration nearly doubled. In spite of rhetoric to reduce government and allow markets to function, the number of government and party workers more than doubled from 4.7 million in 1978 to 10.3 million in 1993.

State investment in agriculture follows the same pattern as that for the rest of the economy. While state expenditures for agriculture increased from 15 billion RMB in 1978 to 44 billion in 1993, expenditures as a percent of total government expenditures fell from 13.6 percent in 1978 to 8.4 percent in 1993 (figure 3). Admittedly, some investments in other sectors of the economy such as the chemical industry, which produces fertilizers, pesticides, and plastic film, supports the agricultural sector. Nonetheless from what we can observe, the drop in public investment in the last decade could well slow agricultural production growth rates in decades to come. Private investment in such things as seed breeding is discouraged by the lack of a strong intellectual property rights law,

Figure 3
State Investment In Agriculture
and Percent of Total Expenditures



and current law forbids private ownership of farmland and discourages private ownership of industries.

In 1978, 34 percent of state expenditures on the agricultural sector went to building water control systems (irrigation and drainage systems), but by 1993 the percentage had dropped to 22 percent. Expenditures for rural administration and production support increased from 51 percent in 1978 to 73 percent in 1993. We believe that a large share of the increase was devoted to supporting the growing number of government officials working at the county, township, and village administrative levels. For example in 1991, 22 percent of government expenditures for agriculture went for administrative purposes. By contrast, the agricultural extension system received 4.4 percent of the agricultural budget or a sum of just under \$40 million.

While the agricultural sector generates 25 percent of national income, the state has allocated only 5 percent of its natural scientists and technicians to work there. Only 7 percent of its engineers and technicians work in the sector. Less than 1 percent of all of China's educators and scientists have been assigned to work in agriculture. The number of agricultural colleges increased from 48 in 1978 to 58 in 1992. But since 1988, the number of graduates, entering students, and enrolled students decreased. In contrast, the number of students en-

tering the fields of industrial production, finance, law, and education increased very rapidly because parents and students believe these fields of study offer more promising futures than agriculture.

Visits by USDA personnel to China in the last 5 years corroborate the statistical trends noted above. Visits to agricultural research facilities show that directors have great difficulties keeping good researchers on the job because staff can earn more money engaging in business activities. Research programs have been hampered because of lack of funds—in some cases experimental fields were rented out to neighboring farmers just to pay wages.

Given China's limited endowment of arable land, future increases in crop output must be achieved primarily through raising yields. Crop yield increases come primarily through investment in irrigation and chemical fertilizer plants, improved seed varieties, cutting losses from disease and pests, and raising technical capabilities of farmers to manage the application of these inputs correctly and efficiently. All of these avenues require substantial investment. Lagging investment for many of these areas is not a positive sign for the future development of China's agricultural economy. These deficiencies can be overcome by either accelerating investment for agricultural inputs from government or private sources or through imports.

Fertilizer Production and Use Up for 1995

Fertilizer use for 1995 is projected at 133 million tons, up more than 6 percent over last year. Output of nitrogenous fertilizer is projected at 89.4 (product weight) million tons with projected imports of 7 million tons. Domestic phosphate fertilizer output is projected at 28.3 million tons with 8.3 million tons of imports. Domestic potash fertilizer production is projected at 500,000 tons with imports at 200,000 tons. The fertilizer production target for the year 2000 (the last year of the Ninth Five-Year Plan 1996-2000) is 140 million tons. Currently, China is purchasing equipment to expand output of synthetic ammonia, urea, and superphosphate (table 5).

Fertilizer use for 1994 totaled 124.5 million tons, about 112 million tons from domestic output and 12.5 million from imports. Fertilizer imports slowed in the beginning of the year with 180,000 tons in January but swelled to 2.2 million tons in December. In 1994, the ceiling price for chemical fertilizer was 1,400 RMB per ton, but in spring 1995 prices rose 36 percent to over 1,900 RMB per ton. Authorities, worried about rising food prices for urban residents, imposed control over the supply and distribution of fertilizer. For 1995, authorities are pressing very hard to boost crop output and may use their control mechanisms to move supplies to rural areas and may provide some subsidies.

The input supply system is still in a state of transition. The government tried to implement market reforms in early 1994, but because of rising grain prices in mid-1994 the government reasserted its control over input supplies. In 1995, the government continues to be involved in providing capital to firms manufacturing chemical fertilizers, initiating price and quality control measures, and overseeing the transportation of input supplies to rural areas.

Data on Arable Land Revised

For the past several years, China's State Statistical Bureau yearbooks listed arable land at 95.3 million hectares. ERS *China Agriculture and Trade Reports*, 1991 and 1993 outlined reasons why farmers and local administrators underreported cultivated land and presented revised arable land estimates

Table 5--China's major manufactured farm inputs, 1992-94

Item	Unit	1992	1993	1994
Yearend stocks:				
Lrg-med tractors 1/	1,000	758	720	690
Hand tractors	1,000	7,423	7,840	8,210
Rural trucks	1,000	654	680	760
Machinery production:				
Lrg-med tractors 2/	1,000	57	37	46
Hand tractors	1,000	1,391	866	
Rural electricity				
consumption 3/	Mil. Kwh	110,069	121,940	151,100
Fertilizer output 4/				
Nitrogen 4/	1,000 tons	15,705	15,467	17,264
Phosphate 4/	1,000 tons	4,622	4,514	5,370
Potassium 5/	1,000 tons	(152)	(179)	393
Fertilizer applied	1,000 tons	29,302	31,501	33,130
Chemical pesticides	1,000 tons	281	249	268
Plastic sheeting 6/	1,000 tons	380	375	380

1/ Large or medium sized tractors with a capacity of 14.7 Kw or more.

2/ Wheeled and crawling tractors of 14.7 Kw capacity or more.

3/ Not all for agricultural production. 4/ Effective nutrient weight.

5/ Numbers in parenthesis derived. 6/ USDA estimate.

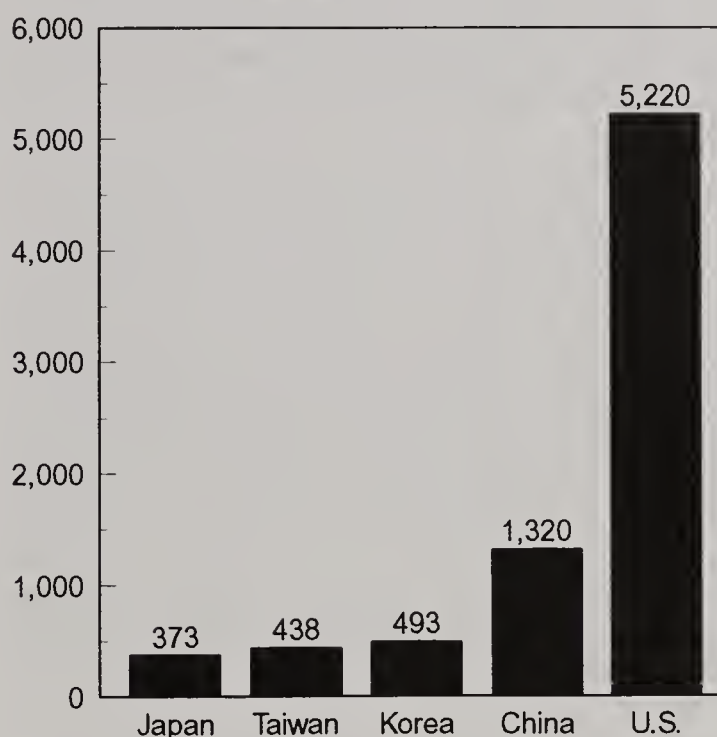
Sources: SSB, *China Statistical Yearbook*, 1994; SSB, *Statistics Abstract*, 1995; SSB, *Rural Statistical Yearbook*, 1994; *China's Customs Statistics*, No. 1, 1994; and various press reports.

made by China. In early 1995, China's State Land Administration announced that arable area may actually be 120 million hectares.

If China has 95.3 million hectares, then each person in China is supported by 839 square meters of arable land compared with 1,320 square meters if the figure is 120 million hectares. By comparison, Japan has 373 square meters per capita, Taiwan 438, South Korea 493, while the United States has 5,220 square meters of arable land per capita. These figures underpin an important point: while China is not as land rich as the United States, it has double or triple the amount of arable land of its neighbors. Because the land endowments are different, one cannot extrapolate economic experience directly from Japan, Taiwan, and Korea to China (figure 4).

Figure 4
East Asian Population Density

Square meters of cultivated area per capita



Grain Output Projected To Rise in 1995

Grain output for 1995 is projected to reach 455 million tons, up from 445 million for 1994. Higher grain prices in 1994 likely will encourage farmers to expand grain area, larger input supplies likely will boost yields, and local government and party cadres will encourage farmers to increase output in 1995. Authorities in Beijing banned rice and corn exports in late 1994, but corn exports could begin again in 1995. Wheat imports for July-June 1995/96 are projected at 12 million tons, up from 10.5 million in 1994/95. [Frederick W. Crook (202) 219-0030]

China's officials project that grain production will reach 455 million tons in 1995, up from the 445 million ton crop in 1994. Because of continued strong consumption growth, however, China likely will be a net grain importer in 1995 with wheat, corn, and rice imports exceeding grain exports. In 1993 and early 1994, government authorities emphasized grain reform policies to strengthen markets, but rising grain prices, shifts in demand, a dip in production in 1994, and reduced stocks led leaders in 1995 to re-emphasize the government's role in monitoring grain production, consumption, and trade.

Area sown to grain for 1995 is projected to rise by about 1.3 million hectares (ha), up 1.2 percent to 110.1 million, primarily because of government and party administrative programs.

USDA projects a total grain crop of around 455 million tons for 1995. The impetus for the larger grain crop comes from two sources. First, grain prices rose an average of 40 percent in 1994, and in spring 1995, prices remained well above those from 1994. Second, grain output for 1994 decreased 2.5 percent which alarmed China's top leaders. Currently, authorities appear to be using various administrative mechanisms such as intervening in grain and input markets to control prices, increasing investment in chemical fertilizer industries, and pushing local government and party cadres in rural areas to use coercive measures to boost grain production (see policy section).

Production of wheat, rice, corn, sorghum, millet, barley, oats, soybeans, potatoes, and pulses (China's definition of grain) totaled 445.1 million tons in 1994, according to the State Statistical Bureau (SSB). Output was down 2.5 percent from the 1993 record crop of 456.4 million tons as yields decreased by 0.9 percent and grain area also decreased. In 1994, grain exports totalled 2 million tons compared with 15.8 million in imports (ERS Autofax No. 6548).

By the year 2005 China's total grain output is projected to rise primarily because of yield increases. As noted in the input section, the rate of yield growth will largely be determined by government action either investing in imported technology or developing their own high yielding seeds. Grain consumption is projected to rise faster than production so that China's grain exports likely will decrease and imports likely will rise.

Record Wheat Crop Forecast for 1995

Wheat output for 1995 is projected at a record 102 million tons, 2.7 million tons more than the 1994 crop. Urban retail wheat flour prices rose 28 percent in calendar year (CY) 1994. Higher wheat prices are projected to boost 1995 wheat area to 29.5 million hectares, up more than 500,000 hectares from last year. Yields are projected at 3.46 tons per ha, up 0.9 percent from last year. Wheat imports for the July/June 1995/96 year are projected to rise to 12 million tons because of increased demand. Imports will help meet consumer de-

Table 6--China's grain production, trade, and stocks for 1993/94, 1994/95 and 1995/96

Indicator	1993/94	1994/95	1995/96*
Million tons			
Total 1/ Jan/Dec			
Production	456.44	445.10	455.00
Imports	6.33	15.8	NA
Exports	16.21	2.0	NA
Stocks	81.58	75.13	NA
Wheat July/June			
Production	106.39	99.30	102.00
Imports	4.30	10.50	12.00
Exports	0.16	0.03	0.00
Stocks	22.73	22.08	23.08
Rice Jan/Dec			
Production (paddy)	177.70	175.93	NA
Imports (milled) 2/	0.70	1.80	NA
Exports (milled)	1.52	0.25	NA
Stocks (milled)	25.17	20.72	NA
Corn Oct/Sept			
Production	102.70	98.28	102.00
Imports	0.00	3.50	1.50
Exports	11.75	1.50	2.00
Stocks	25.00	27.50	24.50

* USDA forecasts as of June 1995. 1/ Wheat, rice (on a paddy basis), coarse grains, soybeans, potatoes (grain-equivalent weight using a 1:5 ratio of grain to raw weight), pulses, and other grains are included in total grain. 2/ For the 1994/95 rice marketing year, trade data are for calendar 1994.

Source: USDA.

mand for higher quality and specialty wheats, and to overcome domestic transportation constraints.

By 2005, China's wheat output is projected to increase at an annual rate of less than 1 percent. While area will not change very much, yields are projected to rise. Nonetheless, rapid economic growth rates, rising incomes and changes in consumer preferences for quality wheat products, and a projected annual population growth of 100 million for the coming decade, will boost domestic demand above supply. USDA baseline projections place China's wheat imports in 2005 at 17.5 million tons, compared with an average of 9.5 million tons from 1990/91 through 1994/95.

Wheat production in 1994 decreased to 99.3 million tons, down 6.7 percent from 1993, as area decreased 4.2 percent to 28.9 million hectares, and yields decreased 2.6 percent to 3.42 metric tons per hectare. Wheat imports for the July 1994/June 1995 year are estimated at 10.5 million tons, up from the 4.3 million tons imported in 1993/94. There are several factors behind the projected increase in imports for 1994/95. During 1992-94, the government reorganized the Grain Bureau and reduced its subsidies for wheat stocks. This action led many enterprises to realize that they were holding larger wheat stocks than they could afford and took measures to reduce stocks. These decisions led to a temporary bulge in available supplies in 1992/93 and 1993/94, and hence, less demand for imported wheat. In this same period, incomes of urban residents grew rapidly. It appears that in 1994, flour mills had milled through the excess stocks and in the meantime rising incomes had shifted flour demand. Authorities were faced with rising urban flour prices that could only be stabilized by stock draw downs, purchasing domestic wheat at higher than world prices, or importing wheat. One of the avenues they opted for was to import wheat (ERS Autofax No. 6546).

Rice Production To Expand in 1995

Rice area will likely increase in 1995 as government officials use coercive administrative measures and programs to maintain paddy land. Rice prices rose in 1994 and remained high at planting time in 1995 which should boost growers enthusiasm for rice cultivation. Yields are expected to increase because of government measures to insure adequate input supplies. Rice imports are likely to be about the same as the previous year and will include both high-quality varieties from Thailand destined for high-income urban residents and lower-quality varieties for the urban poor. For the year, exports likely will fall.

China's rice output by 2005 is projected to increase at an annual rate of less than 1 percent. Area sown to paddy likely will decrease slightly because returns from rice cultivation are projected lower than other uses, but yields are expected to increase slowly. China's rice exports are projected to reach 1.7 million tons, compared with an annual average of 1 million tons from 1990-94. China is expected to export both lower quality rice for Asian, African, and European markets and higher quality *japonica* rice for the East Asian market. China's rice imports by 2005 are projected to be 800,000 tons compared with an annual average of 400,000 tons from 1990-94. These imports likely will include some lower quality rice

to supply the requirements of lower income consumers in big cities but also high quality rice for wealthier consumers.

Rice output for 1994 was 175.9 million tons (paddy basis), down 1 percent from the 177-million-ton 1993 crop. The primary reason for the decrease stemmed from a 0.6 percent decrease in area from 30.4 million hectares in 1993 to 30.2 million hectares in 1994. Output of the early rice crop decreased because of drought conditions in south China in the first half of 1994. Improving weather conditions, however, and better than average intermediate, late and northern crops made up some of the loss from the early crop. Rice yields in 1994 decreased 0.4 percent to 5.83 tons per hectare.

Consumers in urban areas are eating less rice and more meat, fruit, vegetable, and wheat products. High income urban residents tend to shop for their rice in open free markets where they can purchase fresh domestic and imported rice varieties. Poorer urban residents had more difficulties purchasing rice in 1994 because of the rapid increases in rice prices (64 percent price rise for *japonica* and 38 percent for *indica*). In mid-1994, government authorities responded to surging prices by re-instituting rationing for the urban poor. They supplied fixed quantities of lower quality rice at subsidized prices. China has been importing both low and high quality rices to supply these two very different markets in urban areas.

China's exports climbed from 1.37 million tons in 1992/93 to 1.5 million tons in 1993/94, but exports are forecast to drop to 250,000 tons for 1994/95. More normal production conditions in Japan led to reduced exports of *japonica* rice there. Also, strong domestic demand in 1994 and rising prices led the government to impose a ban on rice exports. Imports have steadily risen from 110,000 tons in 1992/93 to 700,000 tons in 1993/94, to 1.8 million tons in 1994/95. Most imports come from North Korea, Thailand and Vietnam (ERS AutoFax No. 6558).

Higher Corn Output Again in 1995

Higher corn prices in 1994 likely will sustain grower's interest in raising corn in 1995. For example, urban retail prices for corn meal rose 31 percent from January to December 1994. Sown area for 1995 is forecast at 21.3 million hectares, up 148,000 hectares from 1994. Yields are projected at 4.8 metric tons per hectare, 2 percent higher than in 1994, which will push output for (Oct./Sept.) 1995/96 to 102 million tons, a 2.7-percent increase from 1994. Corn exports in Oct./Sept. 1995/96 are projected at 2 million tons. Major export destinations will continue to be South Korea, North Korea, Japan, Russia, Malaysia, and other Asian ports. Imports are projected at 1.5 million tons.

Over the next decade, China's corn output is projected to increase at an annual rate of around 1 percent. Area sown to corn and yields are projected to increase. But rapid economic growth, rising incomes with consumer preferences for livestock products, and population growth during the decade likely will boost domestic demand above supply. Corn exports are projected to decline each year to about 4 million tons compared with an annual average of 8.5 million tons from 1990-94. Corn imports will rise marginally to 7.3 mil-

lion tons by 2005 compared with an annual average of 500,000 tons from 1990-94.

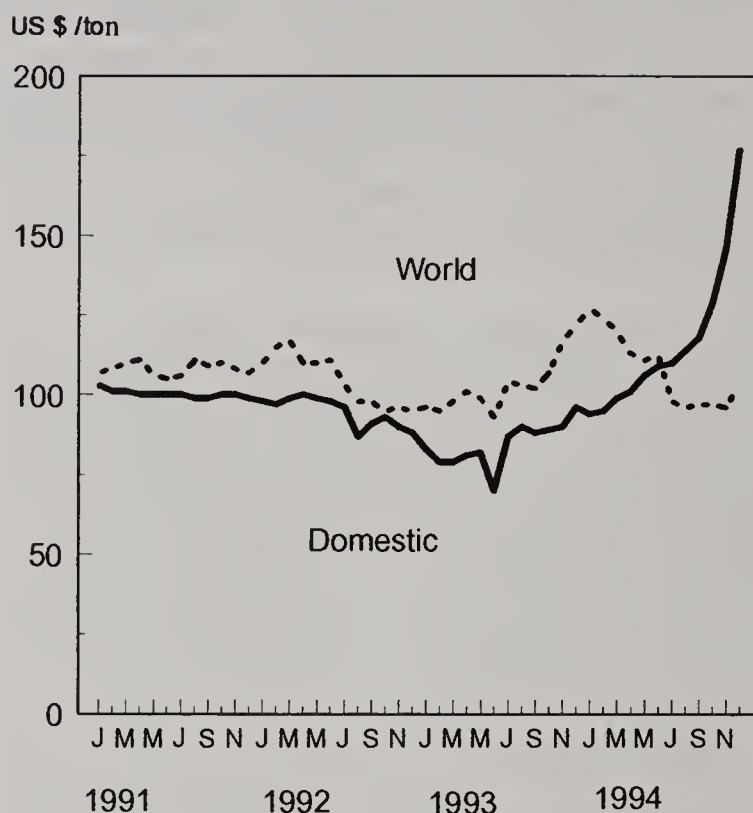
Corn output in 1994 was 99.3 million tons, 3.4 million tons lower than the 1993 crop. Area increased 2.2 percent to 21.2 million hectares, but drought in central and south China reduced yields to 4.69 tons per hectare, down 5.4 percent from a year earlier (ERS Autofax, No. 6547).

In 1993/94, China exported 11.75 million tons of corn with zero imports. In 1994/95, however, China's corn trade shifted dramatically, with exports projected to fall to 1.5 million tons, while imports are forecast to reach 3.5 million. Several factors underlie this dramatic trade shift.

First, earlier in the 1990's, the government reduced its subsidies for government grain companies holding corn stocks. This policy change encouraged firms to dump corn into the market which temporarily boosted supplies for livestock feed and for export. Second, government authorities boosted corn procurement prices in 1994, which set off price increases throughout the corn economy. Farmers began to hold their corn on-farm in anticipation of higher prices and urban consumers, sensing rising prices, rushed into markets to buy grain. Domestic corn prices quickly shot above the world price (figure 5). For example, the February 1995 urban corn meal price was US\$ 256 per ton compared with a U.S. FOB gulf number 3 yellow corn price of \$110 (\$120 per ton converted to a meal basis).

Third, the demand for livestock products and consequently for feed continued to rise rapidly because of increases in population and urban incomes. Exporters and feed millers used up their stocks, and by fall 1994, China faced the following choices: allow urban meat prices to rise (increasing feed costs) and corn prices to remain above world price levels, reduce prices by selling stocks, reducing exports or importing corn. In fall 1994, foreign trade authorities issued instructions to ban corn exports, and in December China contracted to purchase corn on the international market (ERS Autofax No. 6555).

Figure 5
China's Domestic Prices Compared
with US # 3 Yellow Corn FOB Gulf



1991 to 1993 data are open market prices.
1994 data are Zhengzhou wholesale prices.

References

Sources for this section come from materials collected by ERS and Foreign Agriculture Service, Beijing Ag Office, "China Grain and Feed Annual Report" and "China Rice Annual Report," February 1, 1994.

Despite Record Oilseed Output, Oil Imports Surged

China imported a record 2.5 million tons of edible oil in 1993/94 and is projected to import 3.6 million tons in 1994/95. In calendar year 1994 the United States exported 225,000 tons of vegetable oil to China. China's oilseed production for 1994 was a record 42.4 million tons, but demand exceeded domestic supplies because of rising incomes and population increases. Import restrictions, which were used previously to limit imports, were relaxed to combat inflation and oil imports surged. [Francis C. Tuan (202) 219-1282]

China's 1994/95 total oilseed output increased 9.8 percent, reaching a record 42.4 million tons. After 2 years of consecutive strong gains, oilseed production is expected to level off in 1995. Current favorable prices for soybeans and peanuts are likely to maintain 1995 oilseed areas similar to that of 1994.

Demand for oil rose faster than supply. China's vegetable oil imports soared from 1.1 million tons in 1992/93 to 2.5 million in 1993/94. The demand for edible oil in 1994/95 will likely continue to remain strong and total imports are expected to set a new record at 3.6 million tons.

China's oilseed meal production grew substantially in 1994/95 because of record oilseed output for 2 years in a row, while imports remained relatively low. China lost some of its share in world oilseed meal markets largely because of growing internal demand. In 1994/95 meal exports rose to 2.6 million tons. In the long run, however, total exports of meal will continue to slide as more meal is used to meet domestic demand.

Soybean and Peanut Output To Expand in 1995

Soybean and peanut production gained 4.5 and 15 percent over the previous year, respectively, providing the primary boost to the 1994 record. The cotton crop recovered from bollworm infestation, pushing cottonseed output to 7.7 million tons. Production of both rapeseed and sunflower crops also recovered from 1993's low levels (ERS Autofax No. 6550).

In contrast to large yield increases in 1993/94, soybean and peanut yields did not rise in 1994. Area sown to these crops rose because of rising prices in late 1993 and early 1994. Farmers pulled area out of cotton and corn and increased soybean and peanut area. Cotton bollworm infestation and relatively low procurement prices, particularly compared with world market prices, failed to encourage farmers in northern China to plant cotton, and the area target set by the government was not met. In Shandong province, the 1994/95 peanut area increased almost 16 percent while soybean acreage expanded significantly in Henan, and Hebei, as well as in Jiangsu and Nei Monggol Autonomous Region.

In 1995/96, the outlook points to a leveling off in production near the high levels of rapeseed and soybeans of the last year. Prices are expected to increase for most oilseed crops as well as cotton, but the relative incentives may not change that much because of increases in grain prices. Farmers may produce a large peanut crop and a larger cottonseed outturn

helped by stronger government incentives. However, cotton and cottonseed expansion could be slowed by continuing bollworm problems. Farmers in China are expected to opt to maximize income and likely continue to switch from less profitable crops such as cotton or wheat to soybean and peanut production. The government raised its fixed procurement price for cotton in 1995 from 10,880 RMB per ton to 14,000 RMB, an increase of 29 percent. This may induce farmers

Table 7--China's oilseed output and trade

Indicator	1992/93	1993/94	1994/95
1,000 tons			
Total oilseeds 1/			
Production	33,038	38,602	42,374
Imports	150	128	286
Exports	658	1,692	1,285
Soybeans (Jul/Jun)			
Production	10,300	15,310	16,000
Imports	150	125	125
Exports	300	1,100	700
Cottonseed (Jan/Dec)			
Production	7,660	6,650	7,770
Imports	0	0	5
Exports	18	10	5
Peanuts (Oct/Sep)			
Production	5,953	8,420	9,682
Imports	0	3	6
Exports	300	472	500
Rapeseed (Oct/Sep)			
Production	7,653	6,940	7,492
Imports	5	0	150
Exports	20	50	50
Sunflowerseed (Oct/Sep)			
Production	1,472	1,282	1,500
Imports	0	0	0
Exports	20	60	30

Sources: USDA, PS and D.

1/ USDA definition includes soybeans, cottonseed, peanuts, rapeseed, and sunflowerseed.

in major cotton growing areas to retain more area planted to cotton. This is especially true for those farmers in northern China where the risk of insect damage is great. Cottonseed output is not likely to expand in 1995.

In 1994/95, oilseed exports continued to decline from the previous years because of increased domestic demand. Oilseed imports, mostly soybeans and rapeseed, are expected to decrease to 286,000 tons. In 1995/96, trade of oilseeds is expected to remain at low levels.

Edible Oil Imports in 1994/95 To Remain High

China's 1993/94 edible oil imports surged to 2.5 million tons, a record and more than double the previous year. China has historically been a significant importer of edible oil. Despite rapid increases in production, the gap between supply and demand persists. As incomes continue to rise throughout China, edible oil consumption will increase. However, China's edible oil imports have been price sensitive, thus favoring palm oil as a main source for food processing use.

In 1993/94, China's soybean oil imports soared to a record 640,000 tons, much larger than any previous year. The sudden increase stems from several factors. Palm oil prices skyrocketed to a 10-year high due to a tight situation in Malaysia's palm oil supplies. Rising urban incomes have increased demand for soybean oil in China's urban areas, as residents gradually shifted from traditional rapeseed and cottonseed oil to a refined high quality soyoil. The government relaxed import restrictions in 1994 to increase domestic oil supplies in order to reduce the potential for higher inflation rates. In CY 1994, China imported \$104 million worth of U.S. soybean oil (ERS Autofax No. 6553 and 6554).

China's 1994/95 oil imports are expected to surge to a record 3.6 million tons. Strong U.S. export sales during the first half of the marketing year and extension of relatively high domestic oil prices support the estimated 1994/95 imports. However, uncertainties about edible oil import policy for 1995/96 are expected to restrict oil imports at 1994/95 levels. Political decisions such as duty levels, import monopoly, and stocks to use ratios, combined with rising incomes and population in China will determine the level of imports during the next 2 or 3 years.

Oilseed Meal Exports Forecast To Fall

Oilseed meal exports for 1994/95 are expected to rise to 2.6 million tons after 3 consecutive years of decline. The export level is still well below the 3.5 million tons in 1990/91. Soybean meal exports for 1994/95 are projected to increase 150,000 tons to 1.2 million. Soybean meal exports are lower than the 2.3-million-ton peak exported in 1990/91. Soybean meal exports are expected to gradually decrease in the next several years as the domestic demand for meal for livestock feed strongly competes for those supplies set aside for export by joint venture processing facilities.

A large proportion of China's rapeseed and cotton meals have limited use for livestock feed because of their toxic content. These meals are either exported or used for fertilizer. Soy-

bean meal is therefore in great demand because of its non-toxic nature and higher protein content. Strong domestic demand for soymeal pushed prices up in spite of record crops in 1993 and 1994 (ERS Autofax No. 6552 and 6556).

Long-term Outlook for Oilseed, Meal, and Oil Imports

Population growth, rapidly rising incomes, and shifts in consumer food preferences, increased demand for oilseed meals and edible oils. Even with 2 consecutive years of record oilseed production in 1993 and 1994, the supply of oilseeds, soybean meal, and edible oils could not meet demand, resulting in domestic price increases and rising imports.

Despite impressive growth in oilseed crop production during the last 15 years, China's edible vegetable oil consumption is still very low, at about 6.5 kilograms per person. The per capita consumption in China is only a quarter of that of Taiwan and a third of Hong Kong. As economic growth continues and incomes rise, the demand for edible oil will increase. With limited cultivated area and a growing population, China will face decisions to grow either more grain or more cash crops, including oilseeds, in the future. Farmers in coastal provinces are already facing this choice. The choice will be particularly sensitive in southern provinces where the demand for edible oil always has been greater than regional output. This deficit has forced local governments to transport oils from either other provinces or foreign sources. In future years, other provinces may not be able to guarantee supplies of vegetable oil because of increases in their own demand or because of lower oilseed output. As a result, the southern provinces will have to increase imports from foreign sources. In the long-term, economic development will allow an increasing number of provinces to choose between importing oilseeds for local crushing or direct imports of meal and oils.

By 2005, China's soybean production is projected to increase at an annual rate of less than 1 percent. Area sown to soybeans is projected to rise slightly and yield increases are projected to rise more rapidly but still less than 1 percent a year. But rapid economic growth rates, rising incomes along with changes in consumer preference for quality soyoil, tofu and livestock products, together with population growth for the coming decade, will boost domestic demand further. USDA's baseline projects that China's soybean exports will decrease gradually to 400,000 tons a year (largely food type beans for the Asian market) and that soybean imports will rise marginally each year to 1.3 million tons by 2005. For similar reasons, the USDA baseline exercise projects that China's soymeal exports will gradually decrease to 300,000 tons in 2005 and imports will rise to 600,000 tons. Soybean oil imports are projected to rise incrementally throughout the decade.

References

Sources for this section come from materials collected by ERS and Foreign Agriculture Service, Beijing Agricultural Office, "China Oilseed Annual Report," March 1, 1995.

China's Cotton Imports Surge

Cotton production rose 16 percent to 4.3 million tons in 1994, but domestic and foreign demand for China's textiles outpaced supplies. China's cotton imports rose to over 800,000 tons, up 377 percent from a year earlier. For 1995 cotton area and yields are projected to rise to produce a crop of 4.5 million tons. Imports for 1995 are expected to remain high. [W. Hunter Colby (202) 219-0616]

China's (August/July) 1994/95 cotton imports jumped 377 percent to an estimated 838,000 tons, despite unusually high international cotton prices of more than \$2,240 a ton. This follows a 234-percent increase the previous year. China's 1995/96 imports are expected to remain relatively high.

China's official plan for 1995/96 calls for 6 million hectares of cotton area and 4.5 million tons of production. These are increases of 8 and 6 percent, respectively, from 1994/95's area of 5.53 million hectares and production of 4.3 million tons. Given that most of the problems facing cotton farmers in 1994/95 will likely return in 1995/96, the government area and production plan should be considered optimistic. A more likely scenario is one of relatively flat area and production, with yields dependent on the uncertainties of weather and bollworm infestation.

Despite China's high cotton stocks, seemingly inconsistent with robust import demand in 1994/95, imports may remain relatively high in 1995/96. Attempting to explain China's import surge, analysts have noted China's modest domestic output the last 2 years, difficulty in procuring cotton through the state purchase system at the official government price, cotton being diverted away from the state procurement and allocation system by black market dealers, and China's need to replenish useable stocks. However, the last factor is difficult to reconcile when the little information available concerning China's cotton stocks suggests they are actually quite plentiful (cotton stock information is still considered a state secret in China). It may be that some portion of those stocks are of such poor quality that they cannot even be used for spinning yarn. This remains entirely speculative, however, since so little is actually known about the quantity, much less the quality, of China's cotton stocks.

Government Cotton Price Increase

In March 1995, China announced a government procurement price increase of 29 percent to 14,000 RMB (\$1,624) per ton. This is up from 10,880 RMB (\$1,262) during 1994/95, though black market cotton prices reportedly reached 18,000 (\$2,088) to 21,000 RMB (\$2,436) per ton. Cotton production increased in 1994/95, but the supply and marketing cooperatives, the monopoly buying agent of the government, struggled to meet its purchase targets, resulting in lower than expected cotton allocations to state yarn mills. The price increase is undoubtedly an attempt to raise production, but is also an attempt to recapture some of the cotton that has been moving outside the state procurement system.

In addition to the procurement price increase, agriculture officials recently announced that individual provinces will now be responsible for their own cotton supply and consumption. Exceptions to this provincial self-sufficiency policy will be key national textile centers such as Shanghai, Beijing, Tianjin, Chongqing, and Xian. These centers of textile production will have cotton supplies guaranteed by the central government, sourced either from cotton surplus provinces (for instance Xinjiang province) or from imports. The details of this policy are not clear, so the implications are difficult to predict. However, it is one more sign of the government's move away from a market oriented cotton distribution system.

Another policy change recently announced is the restructuring of the government cotton procurement agency, the system of supply and marketing cooperatives (SMC). Reportedly, the system of linked provincial, prefectural, county, and local SMCs will be reformed, with a national-level office formed to oversee all SMC operations. The national-level office will report directly to the State Council. Although still somewhat unclear, it appears that this change will give the central government greater oversight over SMC operations, or in other words, more control over cotton procurement.

Supply Situation Improves Modestly in 1994/95

Cotton production in 1994/95 was 4.33 million tons, up 16 percent from the 3.7-million ton 1993/94 harvest. Area in 1994/95 was 5.53 million hectares. This is up 11 percent from 1993/94, which was the lowest point for cotton area since 1987/88 (table 8).

Bollworm infestation continued to be a problem in several of the major producing provinces, most notably Shandong and Henan. Despite continued problems with bollworms, 1994/95 yields rose 5 percent to 784 kilograms per hectare, in part through additional improvements in pest management techniques. Yet, this was considerably below the 869 kilogram yield in 1991/92, and far less than the 903 kilogram record yield of 1984/85. Farmers were unable to maintain fertilizer and pesticide application rates of those high-yielding years in the face of rapidly rising input costs and the low government procurement price.

Bollworm eradication and control efforts continued in 1994/95. However, pesticide resistance, small plot size, and widespread use of intercropping, are hindering China's efforts. Some innovative low-cost methods to mitigate the effects of the infestation, such as high intensity lights or use of a single row of corn to attract the pests which can then be removed by hand, are becoming more widespread.

Table 8--Cotton production, selected provinces, 1990-94

Province	1990	1991	1992	1993	1994
1,000 tons					
Xinjiang	469	639	668	680	882
Henan	676	948	659	660	628
Jiangsu	464	557	527	429	457
Hubei	517	491	610	425	450
Shandong	975	1351	677	410	559
Anhui	236	271	256	260	258
Hunan	120	149	203	211	238
Hebei	571	634	350	192	390
Jiangxi	57	109	148	156	175
Shanxi	112	112	95	70	85
All others	311	414	402	246	219
Total	4,508	5,675	4,508	3,739	4,341

Sources: SSB, *China Statistical Yearbook*, various years; and SSB, *China Statistical Summary*, 1995.

Nevertheless, the most effective method of controlling the bollworm will be to coordinate planting and pesticide application schedules among farmers. The extremely close proximity of very small plots allows easy migration by the pest, severely limiting the effectiveness of chemical applications. Although extension and research institute efforts are pushing increased local coordination, changing and coordinating the behavior of large numbers of small farmers will be difficult.

Following extensive government "education" of cadres and cotton officials, state procurement improved in 1994/95. In 1993/94, procurement by the state was hindered by farmers holding back cotton for higher future prices, or else diverted to black market dealers reportedly paying up to double the official government price. Much of the cotton purchased on the black market found its way to rural yarn mills rather than the larger state-run mills in the major textile producing regions of Shanghai, Tianjin, and Beijing.

Cotton consumption is expected to decline 4.1 percent in 1994/95 to just under 4.3 million tons. On a marketing year (August/July) basis through April 1995 (the most recent data available), monthly total yarn (including cotton yarn, synthetic yarn, and blended yarn) output dropped 10 percent compared with the same period the previous year. Yarn production fell because the spinning industry has had difficulty acquiring and paying for cotton supplies. Also, some mills were reportedly shutting down or operating at reduced capacity in late 1994 and early 1995, as they underwent equipment renovation and upgrade.

Cotton imports rose dramatically in 1994/95 following the third consecutive poor harvest. Imports were driven by continued strong domestic and export demand for textiles and apparel. Imports are estimated at 838,000 tons, up from only 176,000 in 1993/94. Imports for August through March total 561,000 tons. Exports for the same period are 32,000, with total exports forecast at 65,000 tons, a decline of almost 60 percent. For the last 10 years, China has always managed to maintain at least modest levels of cotton exports, in part to earn needed foreign exchange.

Consistent Net Imports Likely in the Long Term

China's long-term cotton trade outlook is for gradually rising imports and consistent, but modest, exports. Cotton production is expected to increase gradually, but fall short of the expected growth in domestic and export demand for textiles. Although yields in China still have room to grow, rising domestic input prices and a relatively low government-set purchase price will limit yield increases. Accordingly, assuming normal weather, China is expected to become a consistent net cotton importer, though occasional years of net exports are still possible during the 1990's if optimal weather and policy conditions coincide.

The textile industry accounts for roughly 30 percent of China's total export earnings. Officials in China indicate that the importance of the textile sector to the national economy means that the government will likely maintain more control over cotton than other agricultural commodities. As one case in point, recent problems with government procurement resulted in a profusion of edicts demanding strict adherence to government procedures for cotton marketing, grading, pricing, and distribution.

Over the next decade, China's cotton production and consumption are expected to increase, but with domestic and export demand for cotton fiber rising more rapidly, China will likely become a relatively consistent net importer by the late 1990's. However, if China is unable to continue improving its pest management techniques, particularly with regards to the bollworm infestation, the shift to a permanent net import position could occur even sooner. Imports are expected to total around 525,000 tons by the year 2005, though given the most recent domestic production and import trends, China may well need steady imports of this magnitude even sooner. Exports are expected to remain around a relatively stable 130,000 tons.

References

USDA, Foreign Agriculture Service, Beijing Agricultural Office, *China Annual Cotton Reports*, various issues. *Textile Asia*, various issues.

China Returns to Net Sugar Imports

Domestic demand for sugar exceeded supplies in 1994/95 and imports reached 2.8 million tons, compared with exports of 700,000 tons. Cane production fell 2.9 percent in 1994/95, but sugarbeet output rose slightly. Sugar imports for 1995/96 likely will be close to 2.8 million tons because of lagging domestic output and increased demand for sugar because of rising incomes. [W. Hunter Colby (202) 219-0616]

China's 1995/96 sugar imports are expected to remain close to the current high level of about 2.8 million tons, raw value, because of lagging domestic production and because income-driven demand will continue to rise. Area sown to cane in Guangdong is expected to continue shrinking. Nationally, sugar crop area in 1995/96 is expected to face increased pressure from more profitable crops, despite rising sugar crop and retail sugar prices. Farm gate prices have not risen as fast as input costs, producing diminishing returns for cane and beet growers.

Farm gate prices for sugar were raised in 1994/95, but not enough to offset concurrent increases in competing crop prices. Imports in 1994/95 are forecast at 2.8 million tons, raw value, their highest level since 1988/89 and 230 percent above the previous year. Import demand has strengthened because domestic output is expected to fall 4.7 percent to 6.2 million tons—the third consecutive year of decline.

Sugar policy has fluctuated since the late 1980's as China struggles with rising demand and inconsistent production. Most recently, rapid increases in consumer food prices in 1994 and early 1995 prompted the government to back away from some earlier reforms. For sugar, this has meant the reimposition of central control over international trade (see trade section). Along with retreating from trade liberalization, the government recently announced a return to increased central control over domestic sugar marketing—as of April 1, 1995, private enterprises will be banned from participating in sugar wholesale markets.

Sugar cane production fell 5.4 percent and area fell 2.9 percent in 1994/95, according to the latest official China State Statistical Bureau (SSB) estimates. Summer floods damaged cane producing area in both Guangdong and Guangxi during June and July. Cane area in South China, particularly in Guangdong's Pearl River Delta area, is falling to nonagricultural uses. More profitable fruit and vegetable crops are also sup-

planting cane. This trend is unlikely to be reversed given cane's relatively unattractive returns.

As with cane, China's beet sector is also contracting in the face of low relative returns and rising input costs. Although 1994/95 beet production increased 3.8 percent and area rose, the prevailing and expected future relative price structure is unlikely to foster additional increases in beet area (ERS Autofax No. 6557).

Sugar consumption reached 7.8 million tons in 1992/93 before plummeting to 6.6 million in 1993/94 because of rising retail prices. It is expected to rebound in 1994/95 to 7.85 million tons. China's per capita sugar consumption remains extremely low—only 6 kilograms (refined value) in 1994/95. The long-term consumption outlook for China is very bullish as income growth will increase demand for soft drinks, ice cream, desserts, confections, and processed foods.

As of September 1, 1994, authority to import sugar reverted back to CEROILS, the main central government trade organization. This represents tighter central government control over authorization and allocation of import quotas, formerly available from provincial CEROILS offices. The impact of the policy change on imports remains unclear. Importers with valid import quotas indicate they expect to be able to continue to import up to their quota (ERS Autofax No. 6553 and 6557).

Before the policy change, raw sugar imports destined for re-export after refining did not require a central government issued license. The need for government authorization through CEROILS in Beijing may reduce tolling. Despite increased government sugar trade oversight, China is expected to import 2.8 million tons in 1994/95, the highest level of imports in 6 years. With less government intervention, imports would likely be even higher.

Table 9--China's refined sugar statistics.

Year	1991/92	1992/93	1993/94	1994/95
1,000 tons, raw value				
Production	8,492	8,300	6,505	6,200
Imports	1,230	506	874	2,800
Exports	1,420	2,103	1,114	700
Consumption	7,650	7,800	6,600	7,850
Ending stocks	2,002	905	570	1,020

Source: USDA, PS&D.

Table 10--China's sugar crop statistics

Crop	Beet		Cane	
	1993/94	1994/95	1993/94	1994/95
1,000 tons/hectares				
Area (1)	599	708	1,057	1,025
Production (1)	12,048	12,526	64,194	60,926
Sugar (2)	1,115	1,100	5,390	5,100
Recovery	9.25%	8.78%	8.40%	8.37%

Source: (1) SSB, *China Statistical Abstract, 1995*; (2) USDA, PS and D.

By the end of 1993/94, China's ending stocks-to-use ratio fell to 8.6 percent, its lowest level ever, as the sugar shortage in 1993/94, and the resulting increase in retail sugar prices, prompted the government to release stocks in September 1994. With stocks now low, short-term import demand will likely be strengthened by government stock-building.

Although artificial sweetener production is officially discouraged by government policy, production and consumption are believed to have increased in 1994/95. The government claims its policy towards artificial sweeteners is based on health reasons, though protecting the sugar sector is certainly a big contributing factor. The most important sweetener, saccharine, is used primarily by the rural soft drink industry. Increased sugar consumption in 1994/95 may not reduce the

growth of artificial sweeteners, despite the expected increase in sugar output, because of very competitive pricing for the sweeteners.

References

F.O. Licht, "Will China Save the Sugar Market?" *International Sugar and Sweetener Report*, Vol. 127, No. 12/05.04.95, April 4, 1995, pp. 275-80.

USDA, Foreign Agriculture Service, Beijing Agricultural Office, Annual and Semi-Annual China Sugar Reports, various issues.

Livestock Industry Expansion Fuels Corn Imports

Output of pork, beef, mutton, and poultry rose nearly 15 percent from 1993 to 43.5 million tons in 1994. As for feed supplies, oilseed meal production rose about 10 percent but grain (feed) output fell 2.5 percent. In fall 1994 leaders in Beijing banned corn exports to boost domestic feed supplies and imported corn for the first time since 1990. [W. Hunter Colby (202) 219-0616]

In December 1994, China imported corn to supplement domestic output and dampen rapidly rising feed grain prices. This was China's first move to buy on the international corn market since 1990. Income-driven demand for feed grains has grown rapidly over the last decade as China's economy boomed.

Consumer income in China is growing rapidly, stimulating rising levels of livestock product consumption. In response, China's livestock sector is expanding quickly, prompting increased demand for manufactured livestock feed and higher prices. In response to the increased demand for meat, inventories and meat output are expected to continue their upward climb in 1995, despite the government's plan to remove most remaining state support for livestock producers. China's meat and live animal imports will be constrained by China's restrictive sanitary/phytosanitary (SPS) regulations and high effective tariffs (70 percent for pork and beef, 65 percent for poultry meat). Despite these and other obstacles, there are increased market opportunities in 1995 for U.S. exporters, particularly in the areas of breeding stock, genetic materials, poultry meat, and cattle hides.

China's top leadership focused attention on agriculture during the March 1995 National People's Congress. Skyrocketing consumer food prices and localized shortages, in spite of a relatively healthy level of agricultural production during the year, are focusing attention on agriculture. Reform has made it more difficult for the central government to influence agricultural production, distribution, and trade. In response to this, the government has pulled back along a number of fronts, including authorizing price ceilings in some large municipalities, strengthening government procurements at the expense of private traders, and tightening central government controls

over foreign trade. For meat, the pull-back is evident in increased government meat procurement and the reimposition of price ceilings on retail meat sales in large cities.

On balance, however, the government's livestock policy has not changed substantially in several years. Taken most broadly, policy change tends towards reducing government micro-management of meat pricing, marketing, and distribution. Instead, the government is using policy levers such as targeted government lending and other assistance to promote larger, more efficient commercial operations. The hope is to gradually reduce the role of the more inefficient but traditional "household-based" producer.

Cattle, hog, and sheep/goat inventories are all expected to increase in 1995. Rising retail meat prices are increasing producer profitability after a lean period between 1993 and mid-1994. Although inventory and slaughter rose in 1994, the rate of growth was more modest than in recent years as producers struggled with skyrocketing feed costs. Increased retail meat prices in 1995 may enhance returns for producers, stimulating a return to the more rapid growth in inventory and slaughter seen in earlier years, though offsetting feed price increases may again hamper that growth (ERS Autofax No. 6551).

Meat output in 1995 is expected to rise more rapidly than the previous year as slaughter rates and carcass weights increase. In particular, beef and poultry meat output may return to the 20-30 percent rate of growth of 1993. The growth rate for pork and lamb/mutton will be higher than in previous years, but still modest compared with beef and poultry. Changing consumer meat preferences and increased disposable income are promoting relatively higher demand for beef and poultry

meat, and to a lesser extent lamb/mutton, rather than for the more traditional diet of pork (table 11).

China's livestock and meat exports are expected to rise more slowly in 1995 as higher meat prices increase the attractiveness of the domestic market. Meat export growth in 1994 was lower across the board, with beef exports declining absolutely. This trend will likely continue in 1995. In one notable exception, however, live hog shipments to Hong Kong and live sheep/goat exports are expected to continue to rise roughly on trend—both up an estimated 7 percent to 3 million head and 375,000 head, respectively (ERS Autofax No. 6552).

Poultry production is expected to continue to grow rapidly in response to rising urban consumer demand. China is a modest net exporter of poultry products. China's 1995 exports, dominated by sales of live birds to Hong Kong, and fresh, boneless breasts to Japan, should continue to grow. Imports, dominated by chicken specialty pieces (paws, wings, and wing tips), are also expected to expand in 1995, despite an effective tariff of 70 percent.

China's feed mill capacity has doubled since 1987, helping raise China's compound feed output to a record 42 million tons in 1994. Despite higher prices and more difficulty in procuring supplies of feed grains, demand from the growing livestock sector will likely foster another year of record manufactured feed output in 1995.

Table 11--China's meat production, 1990-94

Item	1990	1991	1992	1993	1994
Million tons					
Production:					
Pork	22.8	24.5	26.4	28.5	32.0
Beef	1.3	1.5	1.8	2.3	3.3
Mutton	1.1	1.2	1.3	1.4	1.6
Poultry	3.2	4.0	4.5	5.7	6.6

Sources: SSB, State Statistical Yearbook, 1994; SSB, State Statistical Abstract, 1995; USDA, PS and D.

As outlined in the Ninth Five-Year Plan, government policy towards the livestock feed sector is to support development in amino acids, trace elements, improve feed mill machinery, increase output of ammoniated stalks, and increase use of plant and animal proteins and edible industrial wastes. In addition, through its control over access to credit and targeted state investment, the government hopes to promote intensive rather than extensive growth in the industry. In other words, increasing existing feed mill capacity utilization rates rather than increasing production capacity.

References

USDA, Foreign Agriculture Service, Beijing Agricultural Office, China Livestock Annual and Semi-Annual Reports, various issues.

Information on China via AutoFAX

DIRECTORY OF DOCUMENTS AND TABLES ON CHINA AVAILABLE ON THE ERS AUTO-FAX SYSTEM

Listed below are document ID numbers and document titles currently available on China from the Asia and Western Hemisphere Branch of the Commodity Analysis Division. Call **202-219-1107** or **202-219-0296** and follow the voice prompts.

Document ID No.	Title
6540	Feb 1995, Periodic China Update, China's Urban Grain Prices in 1994 (2 pages).
6541	Tables supporting "An Introduction to China's Rural Grain Supply and Use Tables," China S and O Report, August 1994 (9 tables).
6542	Revised Vegetable Output Numbers. Sweet and Irish Potato Production for China (2 pages). January 23, 1995
6543	Summary of "China Corn Trip Report." (2 pages) Nov. 1994.
6544	Summary of "China Trip Report: Sichuan Agriculture in 1994." Nov. 1994.
6545	"Could China Starve the World? Comments on Lester Brown's Article." (3 pages). Sep. 1994
6546	1994 China Wheat Situation and Outlook. Dec. 1994.
6547	1994 China Corn Situation and Outlook. Dec. 1994.
6548	China's grain area, yield, and production, 1987-95. June 1995.
6549	China's 1993 provincial grain, cotton, oilseed crop, and sugar crop and red meat production. June 1995.
6550	China's oilseeds and cotton area, yield, and production, 1987-93. June 1995.
6551	China's yearend livestock inventory and production output, 1987-93. June 1995.
6552	China's major agricultural exports, by volume, by value, 1988-93. June 1995.
6553	China's major agricultural imports, by volume, by value, 1988-93. June 1995.
6554	U.S. agricultural exports to China, and U.S. imports from China, 1990-93. June 1995.
6555	China's calendar year grain trade, by country. June 1995.
6556	China's calendar year trade in other commodities, 1986-92. June 1995.
6557	China's other agricultural output, 1986-93. June 1995.
6558	Vegetable production and trade in China. March 1995.
6559	
6560	
6561	
6562	
6563	Government Investment in Agriculture Sector. June 1995.
6564	

List of Tables and Figures

Text Tables

1. China's macroeconomic indicators, 1993-94	3
2. China's industrial and agricultural output value, 1991-94	4
3. China's foreign trade indicators, 1991-94	4
4. Agricultural and total trade between the United States and China, 1982-94	6
5. China's major manufactured farm inputs, 1992-94	13
6. China's grain production, trade and stocks for 1993/94, 1994/95 and 1995/96	14
7. China's oilseed output and trade, 1992/93, 1993/94, and 1994/95	17
8. China's cotton production, selected provinces, 1990-94	20
9. China's refined sugar statistics (1,000 tons, raw value)	21
10. China's sugar crop statistics (1,000 tons/hectares)	21
11. China's meat production, 1990-94	23

Text Figures

1. China's Total Trade	5
2. U.S. Bulk and HVP Exports to China, 1984-94	7
3. State Investment in Agriculture and Percent of Total Expenditures	12
4. East Asian Population Density	13
5. China's Domestic Prices Compared with U.S. #3 Yellow Corn FOB Gulf	16

Background for 1995 Farm Legislation

*A series of discussion reports from
USDA's Economic Research Service*

"Farm bill backgrounders" include reports on 10 individual commodities: Wheat, Feed Grains, Rice, Oilseeds, Dairy, Sugar, Honey, Peanuts, Tobacco, and Cotton . . .

plus

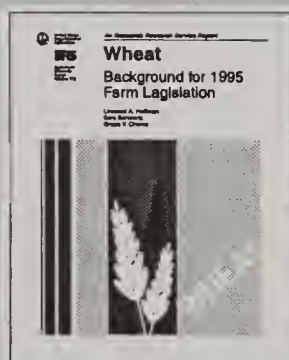
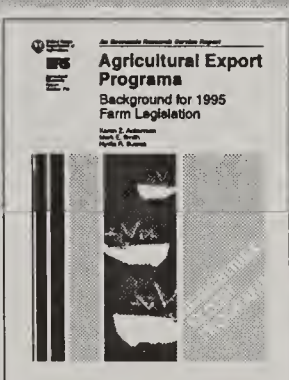
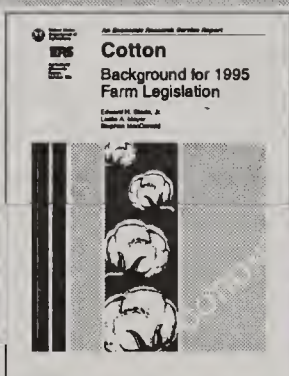
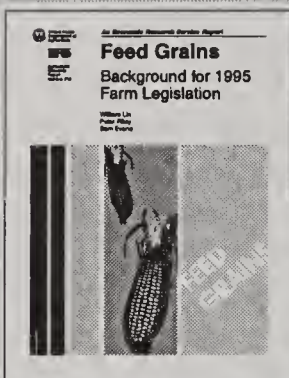
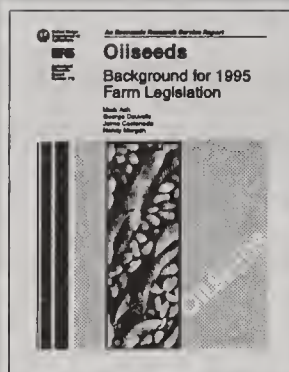
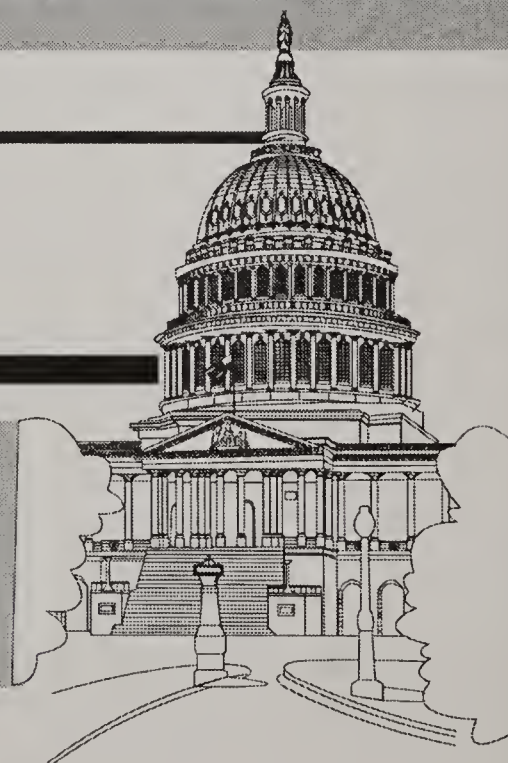
2 reports on ag programs:

- Federal marketing orders and Federal promotion programs
- Agricultural export programs

Inside each backgrounder:

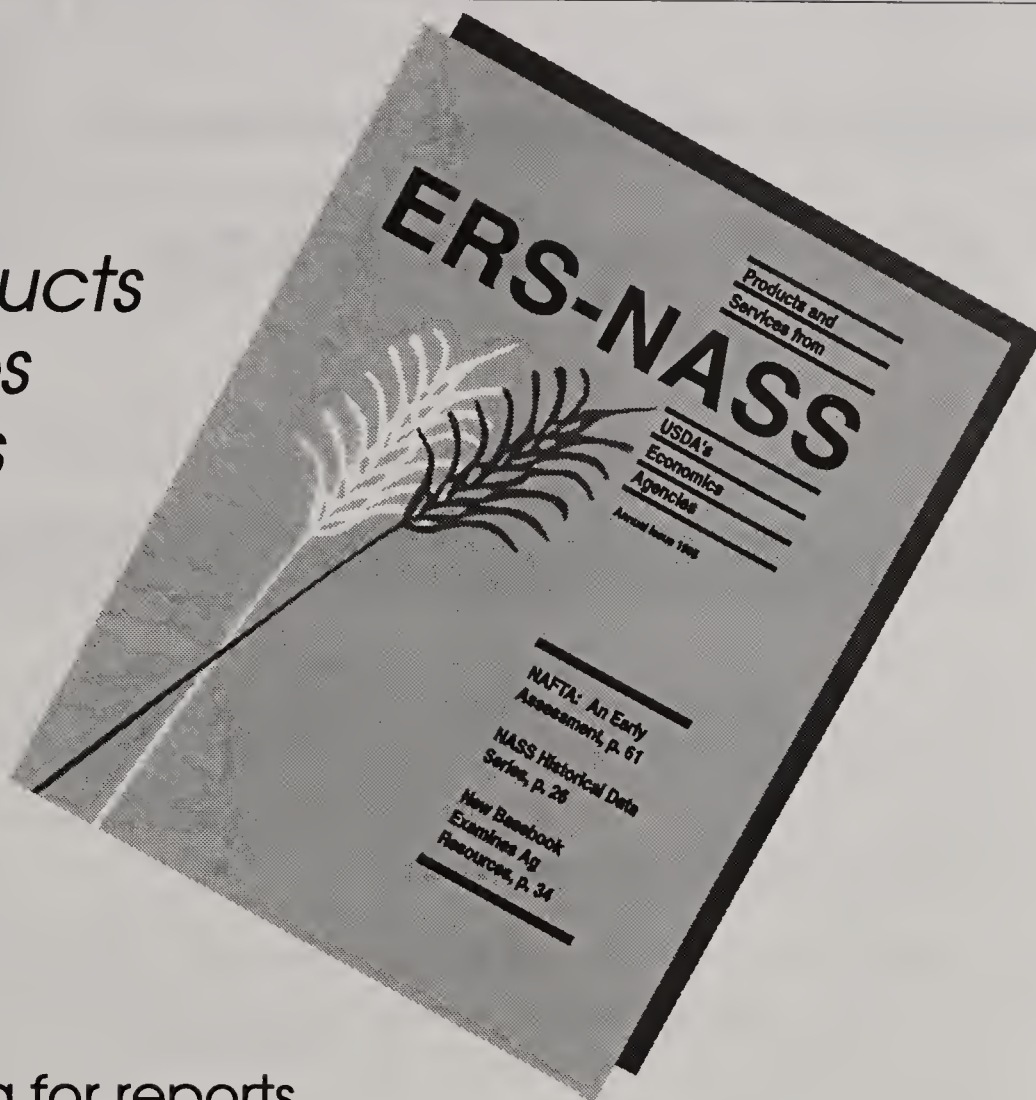
- Program history and provisions
- Industry description and trends (commodity reports)
- Issues and policy options for 1995

\$9-\$12, varying by length of report
To order, dial **1-800-999-6779** in U.S.
and Canada. Other areas dial
1-703-834-0125.
VISA and Mastercard accepted.



The ONE Source

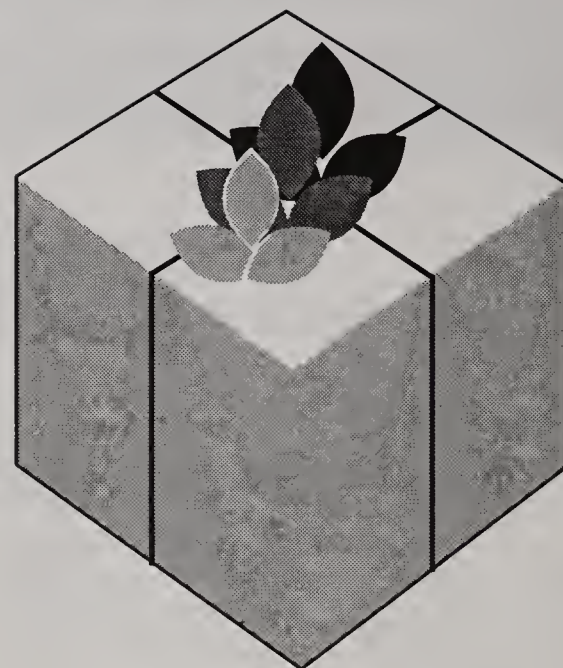
*... for products
and services
from USDA's
Economics
agencies*



Shop by catalog for reports, monographs, periodicals, and data products on agricultural topics that include trade, conservation, food, finance, farm sector economics, and farm programs. Ask for **ERS-NASS catalog** (annual issue).

For a free copy or a free subscription, call 1-800-999-6779

Get the package



Proceedings of USDA's 1995 Outlook Forum *plus*

Long-Term Agricultural Baseline Projections

Two publications in one package:

Speeches and charts from this year's Agricultural Outlook Forum

- economic forces and trade and policy issues shaping the U.S. farm economy—today and into the next century

Economic projections for the U.S. farm sector to the year 2005

- selected commodities, farm income, food prices, and other indicators

Just \$25 for the package—Forum Proceedings and Farm Projections
Ask for **Stock # YCON-95**.

To order call toll free **1-800-999-6779** in U.S. and Canada. Call **1-703-834-0125** from other areas.

Baseline Projections also available alone as **Stock # WAOB-95-1** (\$12 per copy)



China's Agricultural Statistics

Order the new China databases

Just call **1-800-999-6779**, toll free in the U.S. and Canada. Other areas, dial 1-703-834-0125.

**Now Available
on Computer
Disk!!**

The databases, listed below, cover the same material as the statistical bulletin, and are in Lotus 1-2-3 spreadsheet (.WK1) files on DOS-compatible 3.5", 1.44 MB diskettes.

China Databases

**China Databases
are now updated
thru 1992!**

China: Basic Social and Economic Indicators (order # 90010, \$25). National land area and income, provincial population, cultivated area, sown area, multiple cropping index, and GVAO.

China: Miscellaneous Crop Statistics (order # 90013, \$25). National and provincial output and area for fruits, sugarcane, sugarbeets, tobacco, apples, pears, grapes, citrus, and bananas; green manure, forage, and vegetable area; and alcohol, canned goods, sugar, and other food product output.

China: Agricultural Prices (order # 90016, \$25). National and provincial crop and livestock procurement and retail prices, and indices.

China: Consumption and Expenditures Statistics (order # 90021, \$25). National and provincial rural and urban agricultural product consumption and expenditures.

China: Grain Statistics (order # 90011, \$25). National and provincial area, output, and procurement of grain, wheat, rice, corn, soybeans, total coarse grain, millet, and tubers.

China: Livestock Statistics (order # 90014, \$25). National and provincial inventory and slaughter of hogs, sows, sheep, goats, draft animals, yellow cattle, dairy cattle, and water buffalo, also production and procurement of pork, beef, mutton, poultry, rabbit meat, eggs, cow's milk, goat's milk, and honey.

China: Costs of Agricultural Production (order # 90017, \$25). Provincial wheat, rice, corn, rapeseed, soybean, peanuts, and cotton.

China: Fiber and Oilseed Statistics (order # 90012, \$25). National and provincial area, output, and procurement of total oilseeds, rapeseed, sunflowerseed, sesameseed, peanuts, cotton, hemp, jute, and edible oil, national textile product and wool output.

China: Agricultural Inputs and Infrastructure (order # 90015, \$25). National and provincial irrigated area; mechanically plowed, sown, and harvested area; various farm machinery availability and use; and chemical fertilizer production and consumption.

China: Agricultural Trade Statistics (order # 90019, \$25). National trade (MOFETI), major Customs Administration quarterly agricultural imports and exports, by quantity and value, and the \$US/Muan exchange rate.

SPECIAL OFFER!!
Get all these databases
for the **SINGLE LOW PRICE OF \$70!**
Ask for order # 93PKD1.

Add 25 percent for shipping to foreign addresses (includes Canada). Use your VISA or MasterCard. Or send a check or purchase order payable to ERS-NASS to: ERS-NASS, 341 Victory Drive, Herndon, Virginia, USA 22070. Or FAX your request to 1-703-834-0110. For further information, contact Hunter Colby, ERS, Room 637, 1301 New York Avenue, NW, Washington, DC 20005-4788, or phone 202-219-0610.

United States
Department of Agriculture
1301 New York Avenue, NW
Washington, DC 20005-4789

OFFICIAL BUSINESS
Penalty for Private Use, \$300

Moving? To change your address, send
this sheet with label intact, showing new
address to: ERS/ISD, Room 110, 1301
New York Avenue, NW, Washington,
DC 20005-4789.

BULK RATE
POSTAGE & FEES PAID
U.S. Department of Agriculture
PERMIT NO. G-145